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ABSTRACT

This publication provides detailed statistical data on degrees in science and engineering fields by the race/ethnicity of recipients from 1989-1997. Bachelor's and master's degree data were obtained from the universe institution surveys of the National Center for Education Statistics (NCES), U.S. Department of Education. Data on doctorates are from the Survey of Earned Doctorates, a university survey of individual doctorate recipients sponsored by the National Science Foundation (NSF) and four other federal agencies. The estimates of population in the various age categories are based on data that was collected and published by the Bureau of the Census, U.S. Department of Commerce. Sections include: (1) "Technical Notes"; (2) "Detailed Statistical Tables"; (3) "Classification of Programs"; and (4) "Getting Information on the World Wide Web." (CCM)

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Science and Engineering Degrees, by Race/Ethnicity of Recipients:

1989 - 97

Detailed Statistical Tables

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Division of Science Resources Studies
Directorate for Social, Behavioral, and Economic Sciences

National Science Foundation

February 2000

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Detailed Statistical Tables

Susan T. Hill, Author

Division of Science Resources Studies
Directorate for Social, Behavioral, and Economic Sciences

National Science Foundation

February 2000

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General Notes

This publication is based on data obtained from two surveys. Bachelor's and master's degree data were collected by the National Center for Education Statistics, U.S. Department of Education, from all accredited institutions of higher education. Data on doctorates are from Survey of Earned Doctorates, a universe survey of individual doctorate recipients that is sponsored by the National Science Foundation (NSF) and four other Federal agencies.

These data cover earned degrees conferred in the aggregate United States, which includes the 50 States, the District of Columbia, and the U.S. Territories and Outlying Areas (American Samoa, the former Canal Zone, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Trust Territory of the Pacific Islands). Degree data are compiled for a 12-month period, July of one year through June of the following year. For convenience, degrees for such a given 12-month period will be referred to by the year in which the period ended, e.g., 1997 means the 12- month period ending June 1997.

Because racial/ethnic data were collected by broad fields of study only (until 1995), the definition of science and engineering used by NSF for this trend report must include fields normally not included. There is one instance where this difference has a large impact—the broad field of "Social Sciences." The U.S. Department of Education includes the field of history in this broad category, so when it collected the racial/ethnic data up until 1995, this field was included in the "Social Sciences" and comprised 20-23 percent of the "Social Sciences" category for bachelor's and master's degree data.

If the reader is interested in earlier data for science fields, please request *Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1977–91*, NSF 94-306. Please note, however, that before 1985, the broad category of "Engineering" included engineering technologies. This report excludes engineering technologies so that trend data by race/ethnicity are more consistent with the definition of science and engineering used in other NSF reports. However, the reader can use tables 31 and 32 to add in these data so as to correspond to the earlier report (NSF 94-306).

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SECTION A.
TECHNICAL NOTES

INTRODUCTION

This report is based on final data from two Federal surveys. The first is the U.S. Department of Education's Completions Survey conducted annually by the National Center for Education Statistics (NCES) as part of the Integrated Postsecondary Education Data System (IPEDS). The second is the Survey of Earned Doctorates, conducted annually for the National Science Foundation (NSF) and four other Federal agencies. Each source is described in more detail in the following sections.

Data from the Completions Survey were used to report the number of bachelor's and master's degrees. The data on doctoral degrees in this report were derived from the Survey of Earned Doctorates, which surveyed all individuals earning research doctorates, rather than from the Completions Survey, which surveyed the institutions awarding the doctorates. The Survey of Earned Doctorate data were preferred because the data provided by individuals are more specific with respect to the field of specialization and are less likely to contain errors in data reporting and data entry than are the aggregate data provided by institutions. Furthermore, doctorate data provide 100 percent coverage for data by field and sex of individual recipients, whereas institutional data are subject to imputation for nonresponse. For a comparison of reporting on doctoral degrees in the Completions Survey and the Survey of Earned Doctorates, see National Science Foundation, *Science and Engineering Doctorates: 1960–91*, NSF 93-301, Detailed Statistical Tables (Washington, DC, 1993).

In this report, the racial and ethnic categories among U.S. citizens (and permanent resident aliens), who were degree recipients during the 1989–97 period, are charted and tabulated.

The following five racial/ethnic categories were the standard in Federal Government surveys of institutions in this reporting period:

- Black, non-Hispanic
- American Indian or Alaskan Native
- Asian or Pacific Islander
- Hispanic
- White, non-Hispanic

Persons who are U.S. citizens or foreign citizens admitted for permanent residence are classified into the above categories. The ethnic category of Hispanic took precedence over the racial categories in the data collection. In addition, nonresident aliens, i.e., those admitted to the United States for temporary residence, are separately identified as a sixth category in the survey. The nonresident aliens are not to be reported in the aforementioned racial/ethnic groups.

The definitions for the racial/ethnic categories used in the survey are as follows:

Nonresident alien—A person who is not a citizen or national of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely. Resident aliens who are not citizens of the United States and who have been lawfully admitted for permanent residence (and who hold alien registration receipt cards—Form I-551/155) are to be reported in the appropriate racial/ethnic categories along with U.S. citizens.

Black, Non-Hispanic—A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).

American Indian or Alaskan Native—A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander—A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. These areas include, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

Hispanic—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

White, Non-Hispanic—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

BACHELOR'S AND MASTER'S DEGREE DATA

Bachelor's and master's degree data presented in this report were derived from a survey conducted by NCES—the Completions Survey.

This survey requested data on the number of associate's, bachelor's, master's, doctoral, and first-

professional degrees conferred by institutions of higher education. The data were requested according to sex of recipient and field of study for each degree level. Data on the race/ethnicity of degree recipients were collected biennially by NCES for the Office of Civil Rights from 1987 through 1989 and annually since then. A limitation has been that data were collected only at the broad field level[1] (until 1995) according to the Federal racial/ethnic designations of degree recipients. This has affected one field primarily—Social Sciences. Social Sciences includes History in this report, for bachelor's and master's degree data. History comprises 20-23 percent of the Social Sciences total.

The surveys were mailed to all accredited universities and colleges in the United States, including the U.S. territories, for completion by the institution. Followup for nonresponse and editing was conducted by letter and telephone. The overall response rate for institutions of higher education ranged between 94 and 97 percent between 1989 and 1997.

For the bachelor's and master's degree data, the manner of collecting racial and ethnic data is left to the discretion of the institution, provided that the system established results in reasonably accurate data. The information is gathered by NCES for the Office of Civil Rights, U.S. Department of Education, in compliance with title I of the Civil Rights Act of 1964 and title IX of the Education Amendments of 1972.

For institutions that did not report any racial/ethnic data by field, NCES imputed data on the basis of an earlier response for each institution, if available. Table A-1 indicates percentage of 1997 degree recipients in each race/ethnicity category for which race/ethnicity was imputed.

In examining data on degrees awarded to minorities, it must be noted that 1 to 5 percent of all S&E degrees awarded in 1989–97 were reported as awarded to individuals whose race/ethnicity was unknown. This unknown category could affect trends and observable changes in the number and share of awards received by minority students, particularly if there are shifts from year to year in the number of degree recipients with unknown race/ethnicity. As tables 1–2 in section B indicate, the share of degrees awarded to individuals whose race/ethnicity was unknown varied somewhat by degree level.

Table A-1. Percent of bachelor's and master's degree recipients imputed, by race/ethnicity: 1997

Race/ethnicity	Bachelor's	Master's
White	0.6%	1.2%
Black	0.5	0.8
Hispanic	0.9	1.8
Asian or Pacific Islander	1.4	3.0
American Indian or Alaskan Native	0.4	1.6
Nonresident alien	2.6	3.3
Unknown	1.1	4.7

SOURCE: NCES, IPEDS Completions file, 1997

[1]Broad field level refers to the 2-digit program levels in U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* (Washington, DC: GPO, 1991).

This NSF report differs from those published by NCES in that data for the U.S. territories, and the commonwealth of Puerto Rico are included, whereas NCES excludes them from most of its published reports. This affects the data for Hispanics primarily, since institutions in Puerto Rico are included.

Doctoral Degree Data

In the Survey of Earned Doctorates, information is collected during the period of July 1 of one year to June 30 of the next from all persons who have fulfilled the requirements for a research doctorate. The survey is funded jointly by NSF and four other agencies: the U.S. Department of Education, the National Institutes of Health, the National Endowment for the Humanities, and the U.S. Department of Agriculture. The survey forms were sent to all accredited doctorate-granting institutions for distribution by the graduate deans to all research doctorate recipients as they complete degree requirements. Information collected in the survey comprises demographic data, such as the student's sex, citizenship, ethnicity, and racial group; education history, including field of degrees; sources of graduate student support; employment status during the year preceding receipt of the doctorate; postgraduation plans; and background on parents' education. Approximately 92–95 percent of the doctorate recipients complete and return the survey forms. For nonrespondents, commencement programs constituted a source of skeletal information that was added to the file. These variables were sex, field of study, institution, year of doctorate, and educational background. Nonresponse for race/ethnicity is not imputed for individuals, but the percent unknown has been low (around 1-2 percent of those with known citizenship; citizenship was unknown for 2-8 percent of degree recipients). Since changes in non-response do exist, small changes in numbers should be interpreted with caution, especially for 1997. Data are updated annually from completed survey forms submitted belatedly by previous nonrespondents, so numbers may change slightly in the future updates.

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Table 1. Percentage distribution of earned bachelor's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	96.3	96.4	96.4	96.8	96.4	96.5	96.3	96.3	96.4
White, non-Hispanics	79.1	78.1	78.0	77.6	76.5	75.3	73.7	72.7	71.5
Asians	5.7	5.6	5.8	6.0	6.3	6.7	7.3	7.6	8.1
Underrepresented minorities, total	9.5	9.7	10.3	11.0	11.5	12.3	13.0	13.6	14.2
Black, non-Hispanics	5.2	5.3	5.6	6.0	6.3	6.6	6.9	7.2	7.4
Hispanics	3.9	4.0	4.3	4.6	4.7	5.2	5.6	5.9	6.2
American Indians or Alaskan Natives	.4	.4	.4	.4	.5	.5	.5	.6	.6
U.S. citizens and permanent residents, unknown race/ethnicity	2.1	3.0	2.4	2.1	2.1	2.2	2.3	2.4	2.6
Nonresident aliens[2]	3.7	3.6	3.6	3.2	3.6	3.5	3.7	3.7	3.6
	Men								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	95.4	95.5	95.5	96.0	95.6	95.6	95.4	95.5	95.5
White, non-Hispanics	79.8	78.9	78.8	78.5	77.5	76.3	74.8	73.8	72.8
Asians	5.8	5.8	5.9	6.3	6.6	6.9	7.4	7.9	8.4
Underrepresented minorities, total	7.9	8.0	8.5	9.0	9.4	10.2	10.8	11.3	11.7
Black, non-Hispanics	3.9	3.9	4.2	4.5	4.7	5.0	5.1	5.4	5.6
Hispanics	3.7	3.7	3.9	4.2	4.3	4.7	5.1	5.4	5.6
American Indians or Alaskan Natives	.3	.3	.3	.4	.4	.5	.5	.5	.5
U.S. citizens and permanent residents, unknown race/ethnicity	1.9	2.9	2.4	2.2	2.2	2.2	2.4	2.6	2.6
Nonresident aliens[2]	4.6	4.5	4.5	4.0	4.4	4.4	4.6	4.5	4.5
	Women								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	97.6	97.7	97.6	97.7	97.5	97.5	97.4	97.3	97.3
White, non-Hispanics	78.1	77.2	77.0	76.6	75.3	74.0	72.4	71.4	70.0
Asians	5.5	5.4	5.5	5.6	6.0	6.4	7.1	7.4	7.8
Underrepresented minorities, total	11.7	12.0	12.7	13.4	14.1	15.0	15.6	16.2	17.0
Black, non-Hispanics	7.0	7.1	7.4	7.8	8.2	8.7	8.9	9.2	9.5
Hispanics	4.3	4.4	4.8	5.2	5.3	5.8	6.1	6.4	6.8
American Indians or Alaskan Natives	.4	.4	.4	.5	.5	.6	.6	.6	.7
U.S. citizens and permanent residents, unknown race/ethnicity	2.4	3.1	2.4	2.1	2.1	2.1	2.3	2.3	2.5
Nonresident aliens[2]	2.4	2.3	2.4	2.3	2.5	2.5	2.6	2.7	2.7

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Details may not sum to totals due to rounding.

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in science and engineering.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies, data from Department of Education National Center for Education Statistics' Integrated Postsecondary Education Data System Completions Survey.

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Table 2. Percentage distribution of earned master's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	78.5	77.4	76.6	76.4	75.3	75.7	75.9	76.8	76.8
White, non-Hispanics	62.5	61.5	61.1	59.9	58.9	58.9	58.1	58.4	58.0
Asians	5.8	5.6	5.9	6.3	6.0	6.3	6.4	6.7	6.7
Underrepresented minorities, total	4.9	5.0	5.5	5.7	6.0	6.5	7.0	7.4	8.1
Black, non-Hispanics	2.3	2.6	2.9	3.1	3.1	3.3	3.8	4.0	4.4
Hispanics	2.3	2.2	2.4	2.4	2.6	2.9	2.9	3.1	3.3
American Indians or Alaskan Natives	.3	.3	.3	.3	.3	.3	.3	.3	.4
U.S. citizens and permanent residents, unknown race/ethnicity	5.3	5.2	4.0	4.5	4.4	4.0	4.3	4.4	4.0
Nonresident aliens[2]	21.5	22.6	23.4	23.6	24.7	24.3	24.1	23.2	23.2
	Men								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	74.8	73.8	72.6	72.5	71.1	71.6	71.3	72.8	72.4
White, non-Hispanics	58.9	58.3	57.9	56.5	55.5	55.6	54.6	55.7	55.4
Asians	6.2	5.8	6.2	6.6	6.1	6.4	6.7	6.8	6.6
Underrepresented minorities, total	4.2	4.1	4.5	4.7	5.0	5.3	5.6	5.8	6.5
Black, non-Hispanics	1.8	2.0	2.2	2.3	2.4	2.5	2.7	2.8	3.1
Hispanics	2.0	2.0	2.1	2.1	2.4	2.6	2.6	2.7	3.0
American Indians or Alaskan Natives	.3	.2	.2	.2	.2	.3	.3	.3	.3
U.S. citizens and permanent residents, unknown race/ethnicity	5.5	5.5	4.1	4.7	4.5	4.2	4.4	4.5	3.9
Nonresident aliens[2]	25.2	26.2	27.4	27.5	28.9	28.4	28.7	27.2	27.6
	Women								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	86.3	84.7	84.2	83.7	83.1	83.3	83.8	83.4	83.5
White, non-Hispanics	70.0	68.1	67.3	66.4	65.3	64.9	64.2	62.7	61.9
Asians	5.1	5.3	5.4	5.6	5.7	6.1	6.0	6.6	6.9
Underrepresented minorities, total	6.4	6.8	7.6	7.6	8.0	8.7	9.4	9.9	10.6
Black, non-Hispanics	3.4	3.8	4.2	4.5	4.6	4.8	5.5	5.8	6.4
Hispanics	2.7	2.6	3.0	2.8	3.0	3.6	3.5	3.7	3.8
American Indians or Alaskan Natives	.3	.4	.4	.3	.4	.4	.5	.4	.4
U.S. citizens and permanent residents, unknown race/ethnicity	4.7	4.6	3.9	4.1	4.2	3.6	4.1	4.2	4.1
Nonresident aliens[2]	13.7	15.3	15.8	16.3	16.9	16.7	16.2	16.6	16.5

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Details may not sum to totals due to rounding.

Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in science and engineering.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 3. Percentage distribution of earned doctoral degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	67.1	67.2	66.2	64.6	65.1	69.4	71.6	68.4	67.1
White, non-Hispanics	57.5	57.6	55.5	54.0	54.0	53.0	52.4	51.4	50.5
Asians	4.5	4.4	4.9	5.5	6.3	11.4	13.8	11.4	9.3
Underrepresented minorities, total	3.7	3.9	4.2	4.0	4.1	4.2	4.5	4.8	5.0
Black, non-Hispanics	1.7	1.6	1.9	1.7	1.8	1.9	2.1	2.1	2.3
Hispanics	1.8	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.4
American Indians or Alaskan Natives	.2	.2	.2	.3	.2	.2	.3	.4	.3
U.S. citizens and permanent residents, unknown race/ethnicity	1.4	1.3	1.7	1.1	.7	.8	.8	.9	2.4
Nonresident aliens[2]	24.8	28.7	31.8	32.8	31.9	28.7	26.4	28.7	25.6
Citizenship unknown	8.0	4.1	1.9	2.6	3.0	1.9	2.1	2.9	7.2
	Men								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	61.9	61.7	60.4	58.9	59.3	63.9	66.2	62.8	62.0
White, non-Hispanics	52.6	52.4	50.2	49.0	49.0	47.7	47.6	46.5	46.5
Asians	4.8	4.6	4.7	5.3	6.1	11.9	14.0	11.3	9.0
Underrepresented minorities, total	3.0	3.3	3.6	3.3	3.4	3.5	3.7	4.0	4.2
Black, non-Hispanics	1.4	1.4	1.6	1.4	1.5	1.6	1.6	1.7	1.8
Hispanics	1.5	1.8	1.8	1.8	1.8	1.7	1.9	1.9	2.1
American Indians or Alaskan Natives	.2	.2	.2	.2	.1	.2	.2	.3	.2
U.S. citizens and permanent residents, unknown race/ethnicity	1.5	1.4	1.8	1.3	.8	.8	.9	1.0	2.3
Nonresident aliens[2]	29.5	33.9	37.5	38.3	37.4	33.9	31.5	33.9	30.5
Citizenship unknown	8.6	4.4	2.1	2.8	3.3	2.1	2.3	3.3	7.6
	Women								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizens and permanent residents, total[1]	80.6	81.4	80.7	78.8	78.7	82.0	83.4	80.5	77.8
White, non-Hispanics	70.2	71.0	68.4	66.4	65.5	65.1	63.0	61.9	58.5
Asians	3.9	4.0	5.4	5.9	6.9	10.4	13.4	11.4	10.0
Underrepresented minorities, total	5.4	5.4	5.8	5.7	5.9	5.9	6.4	6.5	6.6
Black, non-Hispanics	2.5	2.3	2.8	2.4	2.7	2.7	3.3	2.9	3.2
Hispanics	2.5	2.8	2.7	2.9	2.9	2.9	2.8	3.1	3.0
American Indians or Alaskan Natives	.3	.3	.3	.4	.2	.3	.3	.4	.4
U.S. citizens and permanent residents, unknown race/ethnicity	1.0	1.0	1.2	.8	.4	.6	.6	.8	2.6
Nonresident aliens[2]	12.8	15.4	17.7	19.1	19.0	16.7	15.0	17.3	15.7
Citizenship unknown	6.6	3.2	1.5	2.1	2.3	1.3	1.6	2.2	6.6

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only.

NOTES: Details may not sum to totals due to rounding.

See section C for specific fields included in science and engineering.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies, data from NSF/SRS, Survey of Earned Doctorates.

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Table 4. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	1,030,171	1,062,151	1,107,997	1,150,072	1,179,278	1,183,141	1,174,436	1,179,815	1,186,589
Science and engineering	337,431	345,793	356,785	376,933	388,435	395,380	399,809	405,921	408,749
Engineering	66,947	64,703	62,186	61,898	62,670	62,962	63,330	63,066	62,306
Sciences	270,484	281,090	294,599	315,035	325,765	332,418	336,479	342,855	346,443
Natural sciences	109,350	105,234	105,595	111,108	116,742	122,792	129,447	136,126	140,301
Physical science [1]	17,329	16,203	16,407	17,076	17,691	18,525	19,375	19,853	19,730
Mathematical science	15,314	14,674	14,784	14,851	14,870	14,431	13,759	13,201	12,869
Computer science	30,963	27,695	25,410	24,854	24,477	24,458	24,662	24,405	24,975
Biological science	36,949	38,040	40,351	43,835	47,877	52,213	56,804	61,998	65,061
Agricultural science	8,795	8,622	8,643	10,492	11,827	13,165	14,847	16,669	17,666
Social sciences	161,134	175,856	189,004	203,927	209,023	209,626	207,032	206,729	206,142
Social science	112,180	121,838	130,111	139,884	141,772	139,858	134,431	132,901	131,408
Psychology	48,954	54,018	58,893	64,043	67,251	69,768	72,601	73,828	74,734
Non-S&E [2]	692,740	716,358	751,212	773,139	790,843	787,761	774,627	773,894	777,840
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	1,003,714	1,035,598	1,078,340	1,121,525	1,146,907	1,148,914	1,137,424	1,142,028	1,147,815
Science and engineering	325,108	333,475	344,061	364,695	374,633	381,451	385,055	391,074	393,952
Engineering	61,875	59,786	57,604	57,675	58,165	58,422	58,520	58,304	57,509
Sciences	263,233	273,689	286,457	307,020	316,468	323,029	326,535	332,770	336,443
Natural sciences	104,928	100,908	101,039	106,739	111,656	117,843	124,297	131,065	135,390
Physical science [1]	16,724	15,608	15,799	16,469	16,927	17,812	18,652	19,167	19,059
Mathematical science	14,771	14,150	14,206	14,259	14,318	13,869	13,166	12,643	12,343
Computer science	28,828	25,629	23,373	22,880	22,273	22,185	22,367	22,225	22,976
Biological science	36,076	37,173	39,288	42,842	46,660	51,058	55,523	60,633	63,601
Agricultural science	8,529	8,348	8,373	10,289	11,478	12,919	14,589	16,397	17,411
Social sciences	158,305	172,781	185,418	200,281	204,812	205,186	202,238	201,705	201,053
Social science	109,862	119,288	127,216	136,902	138,391	136,273	130,579	128,893	127,368
Psychology	48,443	53,493	58,202	63,379	66,421	68,913	71,659	72,812	73,685
Non-S&E [2]	678,606	702,123	734,279	756,830	772,274	767,463	752,369	750,954	753,863
	White, non-Hispanics								
Total, all Fields	840,326	856,686	892,363	921,453	931,603	918,124	892,785	884,128	877,759
Science and engineering	266,862	270,225	278,190	292,614	297,171	297,616	294,773	295,082	292,252
Engineering	50,081	47,494	45,162	45,026	44,853	44,687	43,726	43,098	41,624
Sciences	216,781	222,731	233,028	247,588	252,318	252,929	251,047	251,984	250,628
Natural sciences	84,578	80,210	80,111	84,133	87,401	91,196	94,575	98,707	100,871
Physical science [1]	14,238	13,055	13,145	13,678	13,941	14,616	14,952	15,088	14,920
Mathematical science	12,287	11,765	11,649	11,723	11,669	11,089	10,343	9,823	9,484
Computer science	21,711	18,918	17,349	16,844	16,155	15,816	15,532	15,470	15,626
Biological science	28,404	28,814	30,264	32,506	35,080	37,942	40,628	43,680	45,325
Agricultural science	7,938	7,658	7,704	9,382	10,556	11,733	13,120	14,646	15,516
Social sciences	132,203	142,521	152,917	163,455	164,917	161,733	156,472	153,277	149,757
Social science	91,697	98,385	104,783	111,389	111,154	106,863	100,558	97,372	94,411
Psychology	40,506	44,136	48,134	52,066	53,763	54,870	55,914	55,905	55,346
Non-S&E [2]	573,464	586,461	614,173	628,839	634,432	620,508	598,012	589,046	585,507

See explanatory information and SOURCE at end of table.

Table 4. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	37,573	38,027	41,725	46,616	50,587	54,675	59,295	63,117	67,358
Science and engineering	19,138	19,437	20,552	22,635	24,504	26,420	29,128	31,031	33,139
Engineering	6,075	6,012	6,220	6,265	6,407	6,516	6,785	6,799	7,085
Sciences	13,063	13,425	14,332	16,370	18,097	19,904	22,343	24,232	26,054
Natural sciences	7,260	7,326	7,595	8,496	9,524	10,401	12,007	13,212	14,200
Physical science[1]	922	937	983	1,001	1,098	1,096	1,347	1,559	1,620
Mathematical science	1,019	874	915	857	915	926	965	935	877
Computer science	2,268	2,144	2,010	2,082	2,245	2,247	2,365	2,448	2,767
Biological science	2,907	3,245	3,559	4,402	5,103	5,959	7,043	7,958	8,535
Agricultural science	144	126	128	154	163	173	287	312	401
Social sciences	5,803	6,099	6,737	7,874	8,573	9,503	10,336	11,020	11,854
Social science	4,228	4,469	4,852	5,724	6,035	6,726	7,005	7,354	7,787
Psychology	1,575	1,630	1,885	2,150	2,538	2,777	3,331	3,666	4,067
Non-S&E[2]	18,435	18,590	21,173	23,981	26,083	28,255	30,167	32,086	34,219
	Underrepresented minorities, total								
Total, all Fields	102,165	107,377	118,522	129,448	140,086	151,063	158,432	167,382	174,243
Science and engineering	31,950	33,419	36,682	41,383	44,682	48,822	51,844	55,114	58,129
Engineering	4,805	4,729	4,953	5,277	5,714	6,020	6,717	6,974	7,463
Sciences	27,145	28,690	31,729	36,106	38,968	42,802	45,127	48,140	50,666
Natural sciences	10,830	10,530	10,960	11,722	12,510	13,782	14,815	16,135	16,856
Physical science[1]	1,322	1,245	1,355	1,425	1,528	1,737	1,932	2,076	2,063
Mathematical science	1,218	1,178	1,334	1,432	1,490	1,594	1,589	1,619	1,708
Computer science	3,742	3,416	3,292	3,342	3,390	3,611	3,915	3,784	3,734
Biological science	4,151	4,243	4,551	5,043	5,602	6,127	6,606	7,648	8,255
Agricultural science	397	448	428	480	500	713	773	1,008	1,096
Social sciences	16,315	18,160	20,769	24,384	26,458	29,020	30,312	32,005	33,810
Social science	11,212	12,394	14,100	16,647	17,918	19,400	19,621	20,471	21,385
Psychology	5,103	5,766	6,669	7,737	8,540	9,620	10,691	11,534	12,425
Non-S&E[2]	70,215	73,958	81,840	88,065	95,404	102,241	106,588	112,268	116,114
	Black, non-Hispanics								
Total, all Fields	56,837	59,301	65,009	71,311	76,667	82,316	85,287	89,554	92,067
Science and engineering	17,385	18,230	19,987	22,431	24,421	26,289	27,528	29,055	30,444
Engineering	2,067	2,072	2,229	2,362	2,577	2,659	2,845	3,000	3,076
Sciences	15,318	16,158	17,758	20,069	21,844	23,630	24,683	26,055	27,368
Natural sciences	6,005	5,782	5,834	6,401	6,972	7,559	8,021	8,670	9,061
Physical science[1]	697	650	753	816	836	921	1,034	1,100	1,110
Mathematical science	792	720	811	904	965	992	995	981	1,071
Computer science	2,457	2,247	1,997	2,090	2,213	2,398	2,498	2,415	2,370
Biological science	1,916	1,994	2,111	2,385	2,739	2,980	3,231	3,811	4,123
Agricultural science	143	171	162	206	219	268	263	363	387
Social sciences	9,313	10,376	11,924	13,668	14,872	16,071	16,662	17,385	18,307
Social science	6,570	7,226	8,236	9,489	10,254	10,835	10,921	11,357	11,660
Psychology	2,743	3,150	3,688	4,179	4,618	5,236	5,741	6,028	6,647
Non-S&E[2]	39,452	41,071	45,022	48,880	52,246	56,027	57,759	60,499	61,623

See explanatory information and SOURCE at end of table.

Table 4. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	41,361	43,864	49,027	53,007	57,845	62,683	66,691	71,015	74,938
Science and engineering	13,327	13,918	15,351	17,391	18,442	20,529	22,190	23,791	25,266
Engineering	2,561	2,511	2,566	2,733	2,961	3,143	3,651	3,731	4,125
Sciences	10,766	11,407	12,785	14,658	15,481	17,386	18,539	20,060	21,141
Natural sciences	4,417	4,357	4,705	4,892	5,034	5,648	6,119	6,764	7,055
Physical science[1]	563	522	533	546	599	733	800	872	853
Mathematical science	373	413	480	482	470	543	536	585	581
Computer science	1,195	1,085	1,215	1,173	1,096	1,135	1,307	1,280	1,267
Biological science	2,090	2,119	2,264	2,477	2,652	2,901	3,090	3,521	3,793
Agricultural science	196	218	213	214	217	336	386	506	561
Social sciences	6,349	7,050	8,080	9,766	10,447	11,738	12,420	13,296	14,086
Social science	4,197	4,645	5,334	6,519	6,860	7,748	7,877	8,260	8,804
Psychology	2,152	2,405	2,746	3,247	3,587	3,990	4,543	5,036	5,282
Non-S&E[2]	28,034	29,946	33,676	35,616	39,403	42,154	44,501	47,224	49,672
	American Indians or Alaskan Natives								
Total, all Fields	3,967	4,212	4,486	5,130	5,574	6,064	6,454	6,813	7,238
Science and engineering	1,238	1,271	1,344	1,561	1,819	2,004	2,126	2,268	2,419
Engineering	177	146	158	182	176	218	221	243	262
Sciences	1,061	1,125	1,186	1,379	1,643	1,786	1,905	2,025	2,157
Natural sciences	408	391	421	429	504	575	675	701	740
Physical science[1]	62	73	69	63	93	83	98	104	100
Mathematical science	53	45	43	46	55	59	58	53	56
Computer science	90	84	80	79	81	78	110	89	97
Biological science	145	130	176	181	211	246	285	316	339
Agricultural science	58	59	53	60	64	109	124	139	148
Social sciences	653	734	765	950	1,139	1,211	1,230	1,324	1,417
Social science	445	523	530	639	804	817	823	854	921
Psychology	208	211	235	311	335	394	407	470	496
Non-S&E[2]	2,729	2,941	3,142	3,569	3,755	4,060	4,328	4,545	4,819
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	23,650	33,508	25,730	24,008	24,631	25,052	26,912	27,401	28,455
Science and engineering	7,158	10,394	8,637	8,063	8,276	8,593	9,310	9,847	10,432
Engineering	914	1,551	1,269	1,107	1,191	1,199	1,292	1,433	1,337
Sciences	6,244	8,843	7,368	6,956	7,085	7,394	8,018	8,414	9,095
Natural sciences	2,260	2,842	2,373	2,388	2,221	2,464	2,900	3,011	3,463
Physical science[1]	242	371	316	365	360	363	421	444	456
Mathematical science	247	333	308	247	244	260	269	266	274
Computer science	1,107	1,151	722	612	483	511	555	523	849
Biological science	614	871	914	891	875	1,030	1,246	1,347	1,486
Agricultural science	50	116	113	273	259	300	409	431	398
Social sciences	3,984	6,001	4,995	4,568	4,864	4,930	5,118	5,403	5,632
Social science	2,725	4,040	3,481	3,142	3,284	3,284	3,395	3,696	3,785
Psychology	1,259	1,961	1,514	1,426	1,580	1,646	1,723	1,707	1,847
Non-S&E[2]	16,492	23,114	17,093	15,945	16,355	16,459	17,602	17,554	18,023

See explanatory information and SOURCE at end of table.

Table 4. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	26,457	26,553	29,657	28,547	32,371	34,227	37,012	37,787	38,774
Science and engineering	12,323	12,318	12,724	12,238	13,802	13,929	14,754	14,847	14,797
Engineering	5,072	4,917	4,582	4,223	4,505	4,540	4,810	4,762	4,797
Sciences	7,251	7,401	8,142	8,015	9,297	9,389	9,944	10,085	10,000
Natural sciences	4,422	4,326	4,556	4,369	5,086	4,949	5,150	5,061	4,911
Physical science [1]	605	595	608	607	764	713	723	686	671
Mathematical science	543	524	578	592	552	562	593	558	526
Computer science	2,135	2,066	2,037	1,974	2,204	2,273	2,295	2,180	1,999
Biological science	873	867	1,063	993	1,217	1,155	1,281	1,365	1,460
Agricultural science	266	274	270	203	349	246	258	272	255
Social sciences	2,829	3,075	3,586	3,646	4,211	4,440	4,794	5,024	5,089
Social science	2,318	2,550	2,895	2,982	3,381	3,585	3,852	4,008	4,040
Psychology	511	525	691	664	830	855	942	1,016	1,049
Non-S&E [2]	14,134	14,235	16,933	16,309	18,569	20,298	22,258	22,940	23,977

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

[3] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[4] Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 5. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	487,566	495,867	508,952	525,395	537,536	537,061	531,146	528,000	525,282
Science and engineering	198,728	199,916	201,499	209,270	214,388	216,492	216,078	216,614	214,329
Engineering	56,759	54,730	52,522	52,270	52,696	52,569	52,389	51,765	50,846
Sciences	141,969	145,186	148,977	157,000	161,692	163,923	163,689	164,849	163,483
Natural sciences	65,875	62,518	62,091	64,678	67,855	70,956	73,593	76,775	77,585
Physical science[1]	12,157	11,109	11,199	11,466	11,877	12,253	12,559	12,666	12,306
Mathematical science	8,264	7,863	7,804	7,923	7,859	7,754	7,318	7,176	6,938
Computer science	21,418	19,321	17,896	17,670	17,565	17,466	17,628	17,666	18,166
Biological science	18,295	18,631	19,715	21,107	23,111	25,314	26,956	29,189	29,839
Agricultural science	5,741	5,594	5,477	6,512	7,443	8,169	9,132	10,078	10,336
Social sciences	76,094	82,668	86,886	92,322	93,837	92,967	90,096	88,074	85,898
Social science	61,803	67,269	70,731	75,185	75,808	74,218	70,458	68,109	66,407
Psychology	14,291	15,399	16,155	17,137	18,029	18,749	19,638	19,965	19,491
Non-S&E[2]	288,838	295,951	307,453	316,125	323,148	320,569	315,068	311,386	310,953
	U.S. citizens and permanent residents, total[3]								
Total, all Fields	470,449	478,959	490,725	508,289	518,484	517,318	510,030	506,569	503,659
Science and engineering	189,685	190,980	192,516	200,929	204,994	207,030	206,144	206,828	204,767
Engineering	52,160	50,303	48,410	48,518	48,655	48,577	48,145	47,623	46,725
Sciences	137,525	140,677	144,106	152,411	156,339	158,453	157,999	159,205	158,042
Natural sciences	62,973	59,662	59,096	61,872	64,584	67,726	70,302	73,606	74,571
Physical science[1]	11,751	10,694	10,788	11,049	11,352	11,786	12,086	12,229	11,875
Mathematical science	7,917	7,539	7,430	7,565	7,514	7,390	6,960	6,790	6,618
Computer science	19,901	17,849	16,433	16,251	15,964	15,799	15,960	16,093	16,735
Biological science	17,869	18,200	19,171	20,628	22,542	24,739	26,334	28,576	29,170
Agricultural science	5,535	5,380	5,274	6,379	7,212	8,012	8,962	9,918	10,173
Social sciences	74,552	81,015	85,010	90,539	91,755	90,727	87,697	85,599	83,471
Social science	60,431	65,776	69,033	73,577	73,946	72,185	68,291	65,909	64,235
Psychology	14,121	15,239	15,977	16,962	17,809	18,542	19,406	19,690	19,236
Non-S&E[2]	280,764	287,979	298,209	307,360	313,490	310,288	303,886	299,741	298,892
	White, non-Hispanics								
Total, all Fields	398,552	401,024	410,745	422,517	427,240	420,211	407,155	399,132	392,541
Science and engineering	158,590	157,675	158,687	164,220	166,063	165,245	161,731	159,889	156,121
Engineering	42,779	40,533	38,692	38,513	38,244	37,830	36,785	35,977	34,579
Sciences	115,811	117,142	119,995	125,707	127,819	127,415	124,946	123,912	121,542
Natural sciences	52,132	48,848	48,304	50,126	52,048	54,115	55,197	57,162	57,464
Physical science[1]	10,173	9,179	9,203	9,430	9,614	9,958	10,006	9,966	9,695
Mathematical science	6,598	6,253	6,119	6,255	6,131	5,920	5,456	5,239	5,085
Computer science	15,799	13,974	12,916	12,571	12,329	12,022	11,793	11,924	12,070
Biological science	14,377	14,488	15,174	16,030	17,293	18,882	19,790	21,065	21,388
Agricultural science	5,185	4,954	4,892	5,840	6,681	7,333	8,152	8,968	9,226
Social sciences	63,679	68,294	71,691	75,581	75,771	73,300	69,749	66,750	64,078
Social science	51,766	55,662	58,414	61,574	61,269	58,409	54,508	51,580	49,558
Psychology	11,913	12,632	13,277	14,007	14,502	14,891	15,241	15,170	14,520
Non-S&E[2]	239,962	243,349	252,058	258,297	261,177	254,966	245,424	239,243	236,420

See explanatory information and SOURCE at end of table.

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Table 5. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	19,203	19,097	20,773	23,190	24,819	26,420	28,348	29,954	31,732
Science and engineering	11,578	11,528	11,942	13,198	14,132	14,967	16,039	17,015	17,914
Engineering	4,936	4,827	4,969	5,067	5,130	5,235	5,340	5,363	5,611
Sciences	6,642	6,701	6,973	8,131	9,002	9,732	10,699	11,652	12,303
Natural sciences	4,073	4,054	4,149	4,783	5,380	5,721	6,483	7,161	7,481
Physical science [1]	626	592	606	615	675	648	784	908	881
Mathematical science	527	491	482	486	502	523	519	539	494
Computer science	1,420	1,335	1,268	1,373	1,492	1,476	1,583	1,697	1,930
Biological science	1,442	1,573	1,736	2,230	2,633	2,992	3,467	3,878	4,007
Agricultural science	58	63	57	79	78	82	130	139	169
Social sciences	2,569	2,647	2,824	3,348	3,622	4,011	4,216	4,491	4,822
Social science	2,065	2,156	2,260	2,725	2,884	3,204	3,247	3,366	3,617
Psychology	504	491	564	620	738	807	969	1,125	1,205
Non-S&E [2]	7,625	7,569	8,831	9,992	10,687	11,453	12,309	12,939	13,818
	Underrepresented minorities, total								
Total, all Fields	41,650	43,047	46,914	50,695	54,600	58,528	61,542	64,369	66,191
Science and engineering	15,672	15,954	17,027	18,890	20,160	22,001	23,235	24,400	25,112
Engineering	3,638	3,574	3,654	3,952	4,261	4,458	4,917	5,056	5,410
Sciences	12,034	12,380	13,373	14,938	15,899	17,543	18,318	19,344	19,702
Natural sciences	5,411	5,043	5,226	5,450	5,766	6,389	6,888	7,478	7,610
Physical science [1]	771	655	755	745	792	931	998	1,044	991
Mathematical science	636	614	657	675	744	786	820	852	878
Computer science	2,013	1,797	1,758	1,864	1,802	1,939	2,190	2,092	2,122
Biological science	1,734	1,685	1,799	1,885	2,130	2,337	2,449	2,939	3,058
Agricultural science	257	292	257	281	298	396	431	551	561
Social sciences	6,623	7,337	8,147	9,488	10,133	11,154	11,430	11,866	12,092
Social science	5,286	5,788	6,442	7,590	8,013	8,813	8,742	8,990	9,092
Psychology	1,337	1,549	1,705	1,898	2,120	2,341	2,688	2,876	3,000
Non-S&E [2]	25,978	27,093	29,887	31,805	34,440	36,527	38,307	39,969	41,079
	Black, non-Hispanics								
Total, all Fields	21,913	22,590	24,238	26,518	28,374	30,106	30,998	32,223	32,726
Science and engineering	7,685	7,830	8,448	9,375	10,099	10,806	11,127	11,700	11,947
Engineering	1,397	1,416	1,484	1,614	1,764	1,784	1,846	1,964	2,019
Sciences	6,288	6,414	6,964	7,761	8,335	9,022	9,281	9,736	9,928
Natural sciences	2,732	2,476	2,538	2,709	2,872	3,146	3,314	3,591	3,678
Physical science [1]	365	292	391	381	370	464	495	482	466
Mathematical science	374	342	380	374	444	457	476	468	510
Computer science	1,205	1,074	971	1,092	1,049	1,161	1,241	1,218	1,212
Biological science	700	658	696	749	883	927	981	1,236	1,304
Agricultural science	88	110	100	113	126	137	121	187	186
Social sciences	3,556	3,938	4,426	5,052	5,463	5,876	5,967	6,145	6,250
Social science	2,911	3,144	3,547	4,070	4,364	4,644	4,565	4,727	4,659
Psychology	645	794	879	982	1,099	1,232	1,402	1,418	1,591
Non-S&E [2]	14,228	14,760	15,790	17,143	18,275	19,300	19,871	20,523	20,779

See explanatory information and SOURCE at end of table

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Table 5. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	18,002	18,683	20,781	22,026	23,825	25,860	27,875	29,335	30,550
Science and engineering	7,318	7,434	7,888	8,730	9,160	10,190	11,031	11,592	12,044
Engineering	2,100	2,035	2,039	2,187	2,355	2,495	2,895	2,897	3,196
Sciences	5,218	5,399	5,849	6,543	6,805	7,695	8,136	8,695	8,848
Natural sciences	2,432	2,328	2,458	2,497	2,608	2,925	3,196	3,509	3,544
Physical science[1]	362	311	318	326	361	415	437	488	468
Mathematical science	224	249	259	279	273	300	315	354	340
Computer science	750	669	738	724	700	719	876	824	841
Biological science	965	955	1,019	1,043	1,144	1,298	1,340	1,560	1,598
Agricultural science	131	144	124	125	130	193	228	283	297
Social sciences	2,786	3,071	3,391	4,046	4,197	4,770	4,940	5,186	5,304
Social science	2,153	2,384	2,634	3,220	3,269	3,774	3,774	3,860	4,019
Psychology	633	687	757	826	928	996	1,166	1,326	1,285
Non-S&E[2]	10,684	11,249	12,893	13,296	14,665	15,670	16,844	17,743	18,506
	American Indians or Alaskan Natives								
Total, all Fields	1,735	1,774	1,895	2,151	2,401	2,562	2,669	2,811	2,915
Science and engineering	669	690	691	785	901	1,005	1,077	1,108	1,121
Engineering	141	123	131	151	142	179	176	195	195
Sciences	528	567	560	634	759	826	901	913	926
Natural sciences	247	239	230	244	286	318	378	378	388
Physical science[1]	44	52	46	38	61	52	66	74	57
Mathematical science	38	23	18	22	27	29	29	30	28
Computer science	58	54	49	48	53	59	73	50	69
Biological science	69	72	84	93	103	112	128	143	156
Agricultural science	38	38	33	43	42	66	82	81	78
Social sciences	281	328	330	390	473	508	523	535	538
Social science	222	260	261	300	380	395	403	403	414
Psychology	59	68	69	90	93	113	120	132	124
Non-S&E[2]	1,066	1,084	1,204	1,366	1,500	1,557	1,592	1,703	1,794
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	11,044	15,791	12,293	11,887	11,825	12,159	12,985	13,114	13,195
Science and engineering	3,845	5,823	4,860	4,621	4,639	4,817	5,139	5,524	5,620
Engineering	807	1,369	1,095	986	1,020	1,054	1,103	1,227	1,125
Sciences	3,038	4,454	3,765	3,635	3,619	3,763	4,036	4,297	4,495
Natural sciences	1,357	1,717	1,417	1,513	1,390	1,501	1,734	1,805	2,016
Physical science[1]	181	268	224	259	271	249	298	311	308
Mathematical science	156	181	172	149	137	161	165	160	161
Computer science	669	743	491	443	341	362	394	380	613
Biological science	316	454	462	483	486	528	628	694	717
Agricultural science	35	71	68	179	155	201	249	260	217
Social sciences	1,681	2,737	2,348	2,122	2,229	2,262	2,302	2,492	2,479
Social science	1,314	2,170	1,917	1,685	1,780	1,759	1,794	1,973	1,968
Psychology	367	567	431	437	449	503	508	519	511
Non-S&E[2]	7,199	9,968	7,433	7,266	7,186	7,342	7,846	7,590	7,575

See explanatory information and SOURCE at end of table.

Table 5. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	17,117	16,908	18,227	17,106	19,052	19,743	21,116	21,431	21,623
Science and engineering	9,043	8,936	8,983	8,341	9,394	9,462	9,934	9,786	9,562
Engineering	4,599	4,427	4,112	3,752	4,041	3,992	4,244	4,142	4,121
Sciences	4,444	4,509	4,871	4,589	5,353	5,470	5,690	5,644	5,441
Natural sciences	2,902	2,856	2,995	2,806	3,271	3,230	3,291	3,169	3,014
Physical science [1]	406	415	411	417	525	467	473	437	431
Mathematical science	347	324	374	358	345	364	358	386	320
Computer science	1,517	1,472	1,463	1,419	1,601	1,667	1,668	1,573	1,431
Biological science	426	431	544	479	569	575	622	613	669
Agricultural science	206	214	203	133	231	157	170	160	163
Social sciences	1,542	1,653	1,876	1,783	2,082	2,240	2,399	2,475	2,427
Social science	1,372	1,493	1,698	1,608	1,862	2,033	2,167	2,200	2,172
Psychology	170	160	178	175	220	207	232	275	255
Non-S&E [2]	8,074	7,972	9,244	8,765	9,658	10,281	11,182	11,645	12,061

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

[3] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[4] Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System Completions Survey.

Table 6. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	542,605	566,284	599,045	624,677	641,742	646,080	643,290	651,815	661,307
Science and engineering	138,703	145,877	155,286	167,663	174,047	178,888	183,731	189,307	194,420
Engineering	10,188	9,973	9,664	9,628	9,974	10,393	10,941	11,301	11,460
Sciences	128,515	135,904	145,622	158,035	164,073	168,495	172,790	178,006	182,960
Natural sciences	43,475	42,716	43,504	46,430	48,887	51,836	55,854	59,351	62,716
Physical science [1]	5,172	5,094	5,208	5,610	5,814	6,272	6,816	7,187	7,424
Mathematical science	7,050	6,811	6,980	6,928	7,011	6,677	6,441	6,025	5,931
Computer science	9,545	8,374	7,514	7,184	6,912	6,992	7,034	6,739	6,809
Biological science	18,654	19,409	20,636	22,728	24,766	26,899	29,848	32,809	35,222
Agricultural science	3,054	3,028	3,166	3,980	4,384	4,996	5,715	6,591	7,330
Social sciences	85,040	93,188	102,118	111,605	115,186	116,659	116,936	118,655	120,244
Social science	50,377	54,569	59,380	64,699	65,964	65,640	63,973	64,792	65,001
Psychology	34,663	38,619	42,738	46,906	49,222	51,019	52,963	53,863	55,243
Non-S&E [2]	403,902	420,407	443,759	457,014	467,695	467,192	459,559	462,508	466,887
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	533,265	556,639	587,615	613,236	628,423	631,596	627,394	635,459	644,156
Science and engineering	135,423	142,495	151,545	163,766	169,639	174,421	178,911	184,246	189,185
Engineering	9,715	9,483	9,194	9,157	9,510	9,845	10,375	10,681	10,784
Sciences	125,708	133,012	142,351	154,609	160,129	164,576	168,536	173,565	178,401
Natural sciences	41,955	41,246	41,943	44,867	47,072	50,117	53,995	57,459	60,819
Physical science [1]	4,973	4,914	5,011	5,420	5,575	6,026	6,566	6,938	7,184
Mathematical science	6,854	6,611	6,776	6,694	6,804	6,479	6,206	5,853	5,725
Computer science	8,927	7,780	6,940	6,629	6,309	6,386	6,407	6,132	6,241
Biological science	18,207	18,973	20,117	22,214	24,118	26,319	29,189	32,057	34,431
Agricultural science	2,994	2,968	3,099	3,910	4,266	4,907	5,627	6,479	7,238
Social sciences	83,753	91,766	100,408	109,742	113,057	114,459	114,541	116,106	117,582
Social science	49,431	53,512	58,183	63,325	64,445	64,088	62,288	62,984	63,133
Psychology	34,322	38,254	42,225	46,417	48,612	50,371	52,253	53,122	54,449
Non-S&E [2]	397,842	414,144	436,070	449,470	458,784	457,175	448,483	451,213	454,971
	White, non-Hispanics								
Total, all Fields	441,774	455,662	481,618	498,936	504,363	497,913	485,630	484,996	485,218
Science and engineering	108,272	112,550	119,503	128,394	131,108	132,371	133,042	135,193	136,131
Engineering	7,302	6,961	6,470	6,513	6,609	6,857	6,941	7,121	7,045
Sciences	100,970	105,589	113,033	121,881	124,499	125,514	126,101	128,072	129,086
Natural sciences	32,446	31,362	31,807	34,007	35,353	37,081	39,378	41,545	43,407
Physical science [1]	4,065	3,876	3,942	4,248	4,327	4,658	4,946	5,122	5,225
Mathematical science	5,689	5,512	5,530	5,468	5,538	5,169	4,887	4,584	4,399
Computer science	5,912	4,944	4,433	4,273	3,826	3,794	3,739	3,546	3,556
Biological science	14,027	14,326	15,090	16,476	17,787	19,060	20,838	22,615	23,937
Agricultural science	2,753	2,704	2,812	3,542	3,875	4,400	4,968	5,678	6,290
Social sciences	68,524	74,227	81,226	87,874	89,146	88,433	86,723	86,527	85,679
Social science	39,931	42,723	46,369	49,815	49,885	48,454	46,050	45,792	44,853
Psychology	28,593	31,504	34,857	38,059	39,261	39,979	40,673	40,735	40,826
Non-S&E [2]	333,502	343,112	362,115	370,542	373,255	365,542	352,588	349,803	349,087

See explanatory information and SOURCE at end of table

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Table 6. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	18,370	18,930	20,952	23,426	25,768	28,255	30,947	33,163	35,626
Science and engineering	7,560	7,909	8,610	9,437	10,372	11,453	13,089	14,016	15,225
Engineering	1,139	1,185	1,251	1,198	1,277	1,281	1,445	1,436	1,474
Sciences	6,421	6,724	7,359	8,239	9,095	10,172	11,644	12,580	13,751
Natural sciences	3,187	3,272	3,446	3,713	4,144	4,680	5,524	6,051	6,719
Physical science[1]	296	345	377	386	423	448	563	651	739
Mathematical science	492	383	433	371	413	403	446	396	383
Computer science	848	809	742	709	753	771	782	751	837
Biological science	1,465	1,672	1,823	2,172	2,470	2,967	3,576	4,080	4,528
Agricultural science	86	63	71	75	85	91	157	173	232
Social sciences	3,234	3,452	3,913	4,526	4,951	5,492	6,120	6,529	7,032
Social science	2,163	2,313	2,592	2,996	3,151	3,522	3,758	3,988	4,170
Psychology	1,071	1,139	1,321	1,530	1,800	1,970	2,362	2,541	2,862
Non-S&E[2]	10,810	11,021	12,342	13,989	15,396	16,802	17,858	19,147	20,401
	Underrepresented minorities, total								
Total, all Fields	60,515	64,330	71,608	78,753	85,486	92,535	96,890	103,013	108,052
Science and engineering	16,278	17,465	19,655	22,493	24,522	26,821	28,609	30,714	33,017
Engineering	1,167	1,155	1,299	1,325	1,453	1,562	1,800	1,918	2,053
Sciences	15,111	16,310	18,356	21,168	23,069	25,259	26,809	28,796	30,964
Natural sciences	5,419	5,487	5,734	6,272	6,744	7,393	7,927	8,657	9,246
Physical science[1]	551	590	600	680	736	806	934	1,032	1,072
Mathematical science	582	564	677	757	746	808	769	767	830
Computer science	1,729	1,619	1,534	1,478	1,588	1,672	1,725	1,692	1,612
Biological science	2,417	2,558	2,752	3,158	3,472	3,790	4,157	4,709	5,197
Agricultural science	140	156	171	199	202	317	342	457	535
Social sciences	9,692	10,823	12,622	14,896	16,325	17,866	18,882	20,139	21,718
Social science	5,926	6,606	7,658	9,057	9,905	10,587	10,879	11,481	12,293
Psychology	3,766	4,217	4,964	5,839	6,420	7,279	8,003	8,658	9,425
Non-S&E[2]	44,237	46,865	51,953	56,260	60,964	65,714	68,281	72,299	75,035
	Black, non-Hispanics								
Total, all Fields	34,924	36,711	40,771	44,793	48,293	52,210	54,289	57,331	59,341
Science and engineering	9,700	10,400	11,539	13,056	14,322	15,483	16,401	17,355	18,497
Engineering	670	656	745	748	813	875	999	1,036	1,057
Sciences	9,030	9,744	10,794	12,308	13,509	14,608	15,402	16,319	17,440
Natural sciences	3,273	3,306	3,296	3,692	4,100	4,413	4,707	5,079	5,383
Physical science[1]	332	358	362	435	466	457	539	618	644
Mathematical science	418	378	431	530	521	535	519	513	561
Computer science	1,252	1,173	1,026	998	1,164	1,237	1,257	1,197	1,158
Biological science	1,216	1,336	1,415	1,636	1,856	2,053	2,250	2,575	2,819
Agricultural science	55	61	62	93	93	131	142	176	201
Social sciences	5,757	6,438	7,498	8,616	9,409	10,195	10,695	11,240	12,057
Social science	3,659	4,082	4,689	5,419	5,890	6,191	6,356	6,630	7,001
Psychology	2,098	2,356	2,809	3,197	3,519	4,004	4,339	4,610	5,056
Non-S&E[2]	25,224	26,311	29,232	31,737	33,971	36,727	37,888	39,976	40,844

See explanatory information and SOURCE at end of table

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Table 6. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	23,359	25,181	28,246	30,981	34,020	36,823	38,816	41,680	44,388
Science and engineering	6,009	6,484	7,463	8,661	9,282	10,339	11,159	12,199	13,222
Engineering	461	476	527	546	606	648	756	834	929
Sciences	5,548	6,008	6,936	8,115	8,676	9,691	10,403	11,365	12,293
Natural sciences	1,985	2,029	2,247	2,395	2,426	2,723	2,923	3,255	3,511
Physical science[1]	201	211	215	220	238	318	363	384	385
Mathematical science	149	164	221	203	197	243	221	231	241
Computer science	445	416	477	449	396	416	431	456	426
Biological science	1,125	1,164	1,245	1,434	1,508	1,603	1,750	1,961	2,195
Agricultural science	65	74	89	89	87	143	158	223	264
Social sciences	3,563	3,979	4,689	5,720	6,250	6,968	7,480	8,110	8,782
Social science	2,044	2,261	2,700	3,299	3,591	3,974	4,103	4,400	4,785
Psychology	1,519	1,718	1,989	2,421	2,659	2,994	3,377	3,710	3,997
Non-S&E[2]	17,350	18,697	20,783	22,320	24,738	26,484	27,657	29,481	31,166
	American Indians or Alaskan Natives								
Total, all Fields	2,232	2,438	2,591	2,979	3,173	3,502	3,785	4,002	4,323
Science and engineering	569	581	653	776	918	999	1,049	1,160	1,298
Engineering	36	23	27	31	34	39	45	48	67
Sciences	533	558	626	745	884	960	1,004	1,112	1,231
Natural sciences	161	152	191	185	218	257	297	323	352
Physical science[1]	18	21	23	25	32	31	32	30	43
Mathematical science	15	22	25	24	28	30	29	23	28
Computer science	32	30	31	31	28	19	37	39	28
Biological science	76	58	92	88	108	134	157	173	183
Agricultural science	20	21	20	17	22	43	42	58	70
Social sciences	372	406	435	560	666	703	707	789	879
Social science	223	263	269	339	424	422	420	451	507
Psychology	149	143	166	221	242	281	287	338	372
Non-S&E[2]	1,663	1,857	1,938	2,203	2,255	2,503	2,736	2,842	3,025
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	12,606	17,717	13,437	12,121	12,806	12,893	13,927	14,287	15,260
Science and engineering	3,313	4,571	3,777	3,442	3,637	3,776	4,171	4,323	4,812
Engineering	107	182	174	121	171	145	189	206	212
Sciences	3,206	4,389	3,603	3,321	3,466	3,631	3,982	4,117	4,600
Natural sciences	903	1,125	956	875	831	963	1,166	1,206	1,447
Physical science[1]	61	103	92	106	89	114	123	133	148
Mathematical science	91	152	136	98	107	99	104	106	113
Computer science	438	408	231	169	142	149	161	143	236
Biological science	298	417	452	408	389	502	618	653	769
Agricultural science	15	45	45	94	104	99	160	171	181
Social sciences	2,303	3,264	2,647	2,446	2,635	2,668	2,816	2,911	3,153
Social science	1,411	1,870	1,564	1,457	1,504	1,525	1,601	1,723	1,817
Psychology	892	1,394	1,083	989	1,131	1,143	1,215	1,188	1,336
Non-S&E[2]	9,293	13,146	9,660	8,679	9,169	9,117	9,756	9,964	10,448

See explanatory information and SOURCE at end of table.

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Table 6. Number of earned bachelor's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	9,340	9,645	11,430	11,441	13,319	14,484	15,896	16,356	17,151
Science and engineering	3,280	3,382	3,741	3,897	4,408	4,467	4,820	5,061	5,235
Engineering	473	490	470	471	464	548	566	620	676
Sciences	2,807	2,892	3,271	3,426	3,944	3,919	4,254	4,441	4,559
Natural sciences	1,520	1,470	1,561	1,563	1,815	1,719	1,859	1,892	1,897
Physical science [1]	199	180	197	190	239	246	250	249	240
Mathematical science	196	200	204	234	207	198	235	172	206
Computer science	618	594	574	555	603	606	627	607	568
Biological science	447	436	519	514	648	580	659	752	791
Agricultural science	60	60	67	70	118	89	88	112	92
Social sciences	1,287	1,422	1,710	1,863	2,129	2,200	2,395	2,549	2,662
Social science	946	1,057	1,197	1,374	1,519	1,552	1,685	1,808	1,868
Psychology	341	365	513	489	610	648	710	741	794
Non-S&E [2]	6,060	6,263	7,689	7,544	8,911	10,017	11,076	11,295	11,916

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

[3] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[4] Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 7. Number of earned master's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	311,050	324,947	338,498	354,207	370,973	389,008	399,428	408,932	420,954
Science and engineering	70,333	72,228	72,828	76,184	81,415	86,080	88,431	88,730	86,697
Engineering	23,735	23,985	24,007	25,010	27,658	28,707	28,617	27,757	25,870
Sciences	46,598	48,243	48,821	51,174	53,757	57,373	59,814	60,973	60,827
Natural sciences	26,089	26,293	25,669	26,775	27,713	28,869	29,292	30,353	29,919
Physical science [1]	5,703	5,411	5,282	5,352	5,365	5,688	5,735	5,854	5,579
Mathematical science	3,430	3,684	3,632	4,019	4,084	4,108	4,190	4,037	3,790
Computer science	9,399	9,643	9,324	9,530	10,167	10,421	10,332	10,223	10,107
Biological science	4,953	4,893	4,806	4,816	4,798	5,217	5,423	6,207	6,497
Agricultural science	2,604	2,662	2,625	3,058	3,299	3,435	3,612	4,032	3,946
Social sciences	20,509	21,950	23,152	24,399	26,044	28,504	30,522	30,620	30,908
Social science	11,857	12,642	13,350	14,119	15,024	16,230	16,501	16,758	16,466
Psychology	8,652	9,308	9,802	10,280	11,020	12,274	14,021	13,862	14,442
Non-S&E [2]	240,717	252,719	265,670	278,023	289,558	302,928	310,997	320,202	334,257
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	278,927	290,345	300,887	314,555	326,864	342,502	350,672	360,682	371,477
Science and engineering	55,190	55,890	55,779	58,177	61,265	65,201	67,110	68,151	66,609
Engineering	16,988	16,746	16,487	17,111	18,539	19,350	18,921	18,762	17,236
Sciences	38,202	39,144	39,292	41,066	42,726	45,851	48,189	49,389	49,373
Natural sciences	20,167	19,963	18,935	19,459	19,651	20,451	20,957	22,028	21,764
Physical science [1]	4,465	4,047	3,778	3,814	3,763	3,918	3,980	4,119	3,933
Mathematical science	2,454	2,649	2,573	2,907	2,946	3,013	3,034	2,956	2,789
Computer science	6,957	7,080	6,505	6,361	6,388	6,509	6,452	6,352	6,172
Biological science	4,317	4,164	4,057	4,021	3,949	4,284	4,543	5,230	5,589
Agricultural science	1,974	2,023	2,022	2,356	2,605	2,727	2,948	3,371	3,281
Social sciences	18,035	19,181	20,357	21,607	23,075	25,400	27,232	27,361	27,609
Social science	9,642	10,258	10,872	11,629	12,387	13,487	13,695	13,938	13,584
Psychology	8,393	8,923	9,485	9,978	10,688	11,913	13,537	13,423	14,025
Non-S&E [2]	223,737	234,455	245,108	256,378	265,599	277,301	283,562	292,531	304,868
	White, non-Hispanics								
Total, all Fields	230,322	236,874	247,524	257,062	265,668	273,913	277,437	282,713	288,353
Science and engineering	43,945	44,450	44,513	45,649	47,975	50,711	51,417	51,791	50,288
Engineering	12,832	12,859	12,635	12,752	13,920	14,469	13,821	13,573	12,490
Sciences	31,113	31,591	31,878	32,897	34,055	36,242	37,596	38,218	37,798
Natural sciences	16,080	15,742	15,005	15,136	15,322	15,524	15,789	16,672	16,347
Physical science [1]	3,766	3,401	3,129	3,067	3,078	3,145	3,179	3,326	3,173
Mathematical science	2,032	2,169	2,068	2,336	2,354	2,379	2,342	2,227	2,145
Computer science	4,786	4,851	4,637	4,407	4,464	4,286	4,205	4,113	3,868
Biological science	3,679	3,501	3,353	3,251	3,144	3,453	3,589	4,080	4,342
Agricultural science	1,817	1,820	1,818	2,075	2,282	2,261	2,474	2,926	2,819
Social sciences	15,033	15,849	16,873	17,761	18,733	20,718	21,807	21,546	21,451
Social science	7,958	8,360	8,900	9,523	9,923	10,758	10,700	10,807	10,350
Psychology	7,075	7,489	7,973	8,238	8,810	9,960	11,107	10,739	11,101
Non-S&E [2]	186,377	192,424	203,011	211,413	217,693	223,202	226,020	230,922	238,065

See explanatory information and SOURCE at end of table.

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Table 7. Number of earned master's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	10,174	9,994	11,070	12,293	13,169	14,559	15,906	17,281	17,912
Science and engineering	4,100	4,055	4,310	4,763	4,846	5,422	5,683	5,942	5,845
Engineering	1,992	1,863	2,008	2,223	2,260	2,443	2,572	2,621	2,319
Sciences	2,108	2,192	2,302	2,540	2,586	2,979	3,111	3,321	3,526
Natural sciences	1,617	1,629	1,735	1,916	1,918	2,159	2,280	2,405	2,487
Physical science[1]	278	234	251	295	249	284	288	304	308
Mathematical science	178	184	189	201	197	233	239	235	248
Computer science	894	941	1,014	1,105	1,106	1,228	1,239	1,237	1,268
Biological science	223	225	231	264	305	332	417	519	558
Agricultural science	44	45	50	51	61	82	97	110	105
Social sciences	491	563	567	624	668	820	831	916	1,039
Social science	360	404	397	441	477	550	533	586	665
Psychology	131	159	170	183	191	270	298	330	374
Non-S&E[2]	6,074	5,939	6,760	7,530	8,323	9,137	10,223	11,339	12,067
	Underrepresented minorities, total								
Total, all Fields	22,670	24,018	26,666	28,904	31,612	35,731	38,401	41,675	45,152
Science and engineering	3,446	3,615	4,023	4,360	4,899	5,636	6,223	6,552	7,031
Engineering	856	868	906	996	1,195	1,368	1,419	1,478	1,492
Sciences	2,590	2,747	3,120	3,364	3,704	4,268	4,804	5,074	5,539
Natural sciences	1,025	1,002	1,195	1,258	1,358	1,569	1,625	1,680	1,826
Physical science[1]	188	194	182	209	231	257	295	253	299
Mathematical science	99	127	194	147	184	190	237	248	242
Computer science	381	357	425	480	484	552	561	576	599
Biological science	267	244	286	307	312	297	349	406	467
Agricultural science	90	80	108	115	147	273	183	197	219
Social sciences	1,565	1,745	1,925	2,106	2,346	2,699	3,179	3,394	3,713
Social science	777	868	1,031	1,118	1,282	1,443	1,575	1,658	1,719
Psychology	788	877	894	988	1,064	1,256	1,604	1,736	1,994
Non-S&E[2]	19,224	20,403	22,640	24,544	26,713	30,095	32,178	35,123	38,121
	Black, non-Hispanics								
Total, all Fields	13,455	14,473	15,857	17,420	18,897	20,936	22,954	24,588	26,948
Science and engineering	1,652	1,847	2,090	2,356	2,554	2,849	3,339	3,518	3,817
Engineering	355	387	398	466	564	589	665	674	674
Sciences	1,297	1,460	1,692	1,890	1,990	2,260	2,674	2,844	3,143
Natural sciences	495	527	644	699	716	821	881	932	1,010
Physical science[1]	78	87	73	98	105	127	147	116	144
Mathematical science	59	70	100	77	98	109	151	151	157
Computer science	198	232	283	316	308	365	347	379	377
Biological science	124	110	137	149	135	142	162	198	236
Agricultural science	36	28	51	59	70	78	74	88	96
Social sciences	802	933	1,048	1,191	1,274	1,439	1,793	1,912	2,133
Social science	407	462	594	660	730	803	930	965	1,010
Psychology	395	471	454	531	544	636	863	947	1,123
Non-S&E[2]	11,803	12,626	13,767	15,064	16,343	18,087	19,615	21,070	23,131

See explanatory information and SOURCE at end of table.

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Table 7. Number of earned master's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	8,133	8,495	9,684	10,256	11,371	13,177	13,905	15,394	16,360
Science and engineering	1,585	1,587	1,736	1,806	2,092	2,514	2,585	2,730	2,882
Engineering	468	446	468	488	581	719	711	748	765
Sciences	1,117	1,141	1,268	1,318	1,511	1,795	1,874	1,982	2,117
Natural sciences	444	431	494	503	574	680	665	677	720
Physical science[1]	92	98	96	93	114	114	129	127	139
Mathematical science	34	51	85	66	78	75	75	91	71
Computer science	144	118	128	149	162	169	198	173	197
Biological science	126	120	136	146	151	138	167	191	208
Agricultural science	48	44	49	49	69	184	96	95	105
Social sciences	673	710	774	815	937	1,115	1,209	1,305	1,397
Social science	313	341	383	396	474	557	553	596	626
Psychology	360	369	391	419	463	558	656	709	771
Non-S&E[2]	6,548	6,908	7,948	8,450	9,279	10,663	11,320	12,664	13,478
	American Indians or Alaskan Natives								
Total, all Fields	1,082	1,050	1,125	1,228	1,344	1,618	1,542	1,693	1,844
Science and engineering	209	181	200	198	253	273	299	304	332
Engineering	33	35	40	42	50	60	43	56	53
Sciences	176	146	160	156	203	213	256	248	279
Natural sciences	86	44	57	56	68	68	79	71	96
Physical science[1]	18	9	13	18	12	16	19	10	16
Mathematical science	6	6	9	4	8	6	11	6	14
Computer science	39	7	14	15	14	18	16	24	25
Biological science	17	14	13	12	26	17	20	17	23
Agricultural science	6	8	8	7	8	11	13	14	18
Social sciences	90	102	103	100	135	145	177	177	183
Social science	57	65	54	62	78	83	92	97	83
Psychology	33	37	49	38	57	62	85	80	100
Non-S&E[2]	873	869	925	1,030	1,091	1,345	1,243	1,389	1,512
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	15,761	19,459	15,627	16,296	16,415	18,299	18,928	19,013	20,060
Science and engineering	3,699	3,770	2,930	3,405	3,545	3,432	3,787	3,866	3,445
Engineering	1,308	1,156	938	1,140	1,164	1,070	1,109	1,090	935
Sciences	2,391	2,614	1,992	2,265	2,381	2,362	2,678	2,776	2,510
Natural sciences	1,445	1,590	1,000	1,149	1,053	1,199	1,263	1,271	1,104
Physical science[1]	233	218	216	243	205	232	218	236	153
Mathematical science	145	169	122	223	211	211	216	246	154
Computer science	896	931	429	369	334	443	447	426	437
Biological science	148	194	187	199	188	202	188	225	222
Agricultural science	23	78	46	115	115	111	194	138	138
Social sciences	946	1,024	992	1,116	1,328	1,163	1,415	1,505	1,406
Social science	547	626	544	547	705	736	887	887	850
Psychology	399	398	448	569	623	427	528	618	556
Non-S&E[2]	12,062	15,689	12,697	12,891	12,870	14,867	15,141	15,147	16,615

See explanatory information and SOURCE at end of table.

Table 7. Number of earned master's degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	32,123	34,602	37,611	39,652	44,109	46,506	48,756	48,250	49,477
Science and engineering	15,143	16,338	17,049	18,007	20,150	20,879	21,321	20,579	20,088
Engineering	6,747	7,239	7,520	7,899	9,119	9,357	9,696	8,995	8,634
Sciences	8,396	9,099	9,529	10,108	11,031	11,522	11,625	11,584	11,454
Natural sciences	5,922	6,330	6,734	7,316	8,062	8,418	8,335	8,325	8,155
Physical science [1]	1,238	1,364	1,504	1,538	1,602	1,770	1,755	1,735	1,646
Mathematical science	976	1,035	1,059	1,112	1,138	1,095	1,156	1,081	1,001
Computer science	2,442	2,563	2,819	3,169	3,779	3,912	3,880	3,871	3,935
Biological science	636	729	749	795	849	933	880	977	908
Agricultural science	630	639	603	702	694	708	664	661	665
Social sciences	2,474	2,769	2,795	2,792	2,969	3,104	3,290	3,259	3,299
Social science	2,215	2,384	2,478	2,490	2,637	2,743	2,806	2,820	2,882
Psychology	259	385	317	302	332	361	484	439	417
Non-S&E [2]	16,980	18,264	20,562	21,645	23,959	25,627	27,435	27,671	29,389

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

[3] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[4] Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System Completions Survey.

Table 8. Number of earned master's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	149,399	154,025	156,895	162,299	169,753	176,762	179,198	180,360	181,457
Science and engineering	47,724	48,424	47,748	49,768	53,102	55,461	55,803	54,928	52,181
Engineering	20,654	20,717	20,650	21,345	23,565	24,286	23,986	23,005	21,176
Sciences	27,070	27,707	27,098	28,423	29,537	31,175	31,817	31,923	31,005
Natural sciences	17,250	17,258	16,530	17,480	18,076	18,813	18,926	19,185	18,551
Physical science [1]	4,180	3,981	3,825	3,895	3,803	4,030	4,000	3,968	3,758
Mathematical science	2,060	2,208	2,146	2,457	2,468	2,541	2,549	2,468	2,245
Computer science	6,773	6,968	6,563	6,884	7,411	7,727	7,630	7,500	7,252
Biological science	2,491	2,393	2,315	2,316	2,365	2,475	2,616	2,925	3,048
Agricultural science	1,746	1,708	1,681	1,928	2,029	2,040	2,131	2,324	2,248
Social sciences	9,820	10,449	10,568	10,943	11,461	12,362	12,891	12,738	12,454
Social science	7,006	7,424	7,574	7,939	8,419	8,945	8,981	8,910	8,585
Psychology	2,814	3,025	2,994	3,004	3,042	3,417	3,910	3,828	3,869
Non-S&E [2]	101,675	105,601	109,147	112,531	116,651	121,301	123,395	125,432	129,276
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	126,777	130,326	131,745	136,062	140,932	146,621	148,039	150,310	151,256
Science and engineering	35,681	35,722	34,667	36,063	37,737	39,700	39,784	39,968	37,795
Engineering	14,446	14,174	13,977	14,350	15,542	16,140	15,624	15,402	13,990
Sciences	21,235	21,548	20,690	21,713	22,195	23,560	24,160	24,566	23,805
Natural sciences	12,985	12,819	11,839	12,393	12,504	12,985	13,134	13,545	13,085
Physical science [1]	3,226	2,953	2,755	2,784	2,685	2,794	2,778	2,781	2,618
Mathematical science	1,428	1,559	1,463	1,745	1,717	1,803	1,765	1,758	1,582
Computer science	4,925	5,035	4,419	4,504	4,600	4,779	4,725	4,613	4,416
Biological science	2,134	2,014	1,945	1,931	1,959	2,013	2,164	2,470	2,638
Agricultural science	1,272	1,258	1,257	1,429	1,543	1,596	1,702	1,923	1,831
Social sciences	8,250	8,729	8,851	9,320	9,691	10,575	11,026	11,021	10,720
Social science	5,535	5,840	5,961	6,411	6,760	7,288	7,264	7,317	6,978
Psychology	2,715	2,889	2,890	2,909	2,931	3,287	3,762	3,704	3,742
Non-S&E [2]	91,096	94,604	97,078	99,999	103,195	106,921	108,255	110,342	113,461
	White, non-Hispanics								
Total, all Fields	104,042	106,075	107,917	110,797	113,717	116,758	116,655	117,559	117,942
Science and engineering	28,115	28,250	27,634	28,113	29,493	30,846	30,464	30,591	28,930
Engineering	10,874	10,922	10,742	10,[illegible]5	11,777	12,232	11,581	11,383	10,385
Sciences	17,241	17,328	16,892	17,338	17,716	18,614	18,883	19,208	18,545
Natural sciences	10,357	10,116	9,491	9,675	9,837	9,964	10,031	10,429	10,104
Physical science [1]	2,750	2,518	2,299	2,234	2,229	2,252	2,256	2,288	2,172
Mathematical science	1,173	1,275	1,169	1,389	1,332	1,420	1,354	1,326	1,239
Computer science	3,430	3,474	3,260	3,236	3,326	3,309	3,231	3,170	2,978
Biological science	1,830	1,711	1,629	1,566	1,593	1,643	1,740	1,958	2,108
Agricultural science	1,174	1,138	1,134	1,250	1,357	1,340	1,450	1,687	1,607
Social sciences	6,884	7,212	7,401	7,663	7,879	8,650	8,852	8,779	8,441
Social science	4,592	4,781	4,981	5,276	5,453	5,880	5,750	5,758	5,428
Psychology	2,292	2,431	2,420	2,387	2,426	2,770	3,102	3,021	3,013
Non-S&E [2]	75,927	77,825	80,283	82,684	84,224	85,912	86,191	86,968	89,012

See explanatory information and SOURCE at end of table

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Table 8. Number of earned master's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	5,917	5,670	6,220	6,823	7,125	7,791	8,385	8,877	8,585
Science and engineering	2,939	2,799	2,959	3,276	3,237	3,561	3,733	3,726	3,453
Engineering	1,699	1,557	1,685	1,816	1,819	1,932	2,023	2,000	1,758
Sciences	1,240	1,242	1,274	1,460	1,418	1,629	1,710	1,726	1,695
Natural sciences	990	976	1,031	1,169	1,149	1,279	1,359	1,361	1,324
Physical science[1]	179	140	165	206	150	182	187	168	168
Mathematical science	117	106	108	103	121	126	134	132	125
Computer science	565	609	627	705	710	785	785	775	755
Biological science	105	97	104	125	136	151	209	237	244
Agricultural science	24	24	27	30	32	35	44	49	32
Social sciences	250	266	243	291	269	350	351	365	371
Social science	206	224	196	229	219	276	272	287	285
Psychology	44	42	47	62	50	74	79	78	86
Non-S&E[2]	2,978	2,871	3,261	3,547	3,888	4,230	4,652	5,151	5,132
	Underrepresented minorities, total								
Total, all Fields	9,039	9,321	10,207	10,676	11,903	13,144	13,984	14,735	15,607
Science and engineering	1,990	2,005	2,129	2,340	2,637	2,964	3,143	3,197	3,370
Engineering	685	687	711	775	924	1,052	1,082	1,095	1,084
Sciences	1,305	1,318	1,418	1,565	1,713	1,912	2,061	2,102	2,286
Natural sciences	639	610	664	728	764	899	905	912	975
Physical science[1]	133	130	124	144	142	167	185	145	171
Mathematical science	58	74	112	92	102	111	122	140	135
Computer science	255	238	244	283	308	337	361	347	365
Biological science	129	120	116	137	132	125	136	170	187
Agricultural science	64	48	68	72	80	159	101	110	117
Social sciences	666	708	754	837	949	1,013	1,156	1,190	1,311
Social science	416	429	482	556	672	692	734	749	809
Psychology	250	279	272	281	277	321	422	441	502
Non-S&E[2]	7,049	7,316	8,078	8,336	9,266	10,180	10,841	11,538	12,237
	Black, non-Hispanics								
Total, all Fields	4,964	5,169	5,619	5,794	6,472	7,007	7,636	7,998	8,444
Science and engineering	878	950	1,028	1,166	1,253	1,376	1,534	1,565	1,617
Engineering	262	287	299	332	407	422	464	464	449
Sciences	616	663	729	834	846	954	1,070	1,101	1,168
Natural sciences	290	307	338	382	386	435	434	467	484
Physical science[1]	56	61	43	66	58	74	86	59	74
Mathematical science	32	37	53	44	48	62	64	78	77
Computer science	119	140	150	175	193	205	199	205	208
Biological science	59	51	58	61	47	48	50	76	69
Agricultural science	24	18	34	36	40	46	35	49	56
Social sciences	326	356	391	452	460	519	636	634	684
Social science	206	223	262	315	345	358	418	391	426
Psychology	120	133	129	137	115	161	218	243	258
Non-S&E[2]	4,086	4,219	4,591	4,628	5,219	5,631	6,102	6,433	6,827

See explanatory information and SOURCE at end of table.

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Table 8. Number of earned master's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	3,597	3,713	4,124	4,381	4,875	5,483	5,725	6,072	6,466
Science and engineering	970	959	992	1,066	1,255	1,427	1,458	1,478	1,576
Engineering	394	373	378	408	480	582	578	580	589
Sciences	576	586	614	658	775	845	880	898	987
Natural sciences	282	275	294	309	341	414	423	402	435
Physical science[1]	65	63	73	64	76	80	88	80	86
Mathematical science	21	33	52	47	50	44	53	57	50
Computer science	100	93	84	98	104	120	151	125	141
Biological science	62	61	54	69	76	65	75	85	107
Agricultural science	34	25	31	31	35	105	56	55	51
Social sciences	294	311	320	349	434	431	457	496	552
Social science	176	178	196	218	282	290	283	320	344
Psychology	118	133	124	131	152	141	174	176	208
Non-S&E[2]	2,627	2,754	3,132	3,315	3,620	4,056	4,267	4,594	4,890
	American Indians or Alaskan Natives								
Total, all Fields	478	439	464	501	556	654	623	665	697
Science and engineering	142	96	109	108	129	161	151	154	177
Engineering	29	27	34	35	37	48	40	51	46
Sciences	113	69	75	73	92	113	111	103	131
Natural sciences	67	28	32	37	37	50	48	43	56
Physical science[1]	12	6	8	14	8	13	11	6	11
Mathematical science	5	4	7	1	4	5	5	5	8
Computer science	36	5	10	10	11	12	11	17	16
Biological science	8	8	4	7	9	12	11	9	11
Agricultural science	6	5	3	5	5	8	10	6	10
Social sciences	46	41	43	36	55	63	63	60	75
Social science	34	28	24	23	45	44	33	38	39
Psychology	12	13	19	13	10	19	30	22	36
Non-S&E[2]	336	343	355	393	427	493	472	511	520
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	7,779	9,260	7,401	7,766	8,187	8,928	9,015	9,139	9,122
Science and engineering	2,637	2,668	1,945	2,334	2,370	2,329	2,444	2,454	2,042
Engineering	1,188	1,008	839	984	1,022	924	938	924	763
Sciences	1,449	1,660	1,106	1,350	1,348	1,405	1,506	1,530	1,279
Natural sciences	999	1,117	653	821	754	843	839	843	682
Physical science[1]	164	165	167	200	164	193	150	180	107
Mathematical science	80	104	74	161	162	146	155	160	83
Computer science	675	714	288	280	256	348	348	321	318
Biological science	70	86	96	103	98	94	79	105	99
Agricultural science	10	48	28	77	74	62	107	77	75
Social sciences	450	543	453	529	594	562	667	687	597
Social science	321	406	302	350	416	440	508	523	456
Psychology	129	137	151	179	178	122	159	164	141
Non-S&E[2]	5,142	6,592	5,456	5,432	5,817	6,599	6,571	6,685	7,080

See explanatory information and SOURCE at end of table.

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Table 8. Number of earned master's degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	22,622	23,699	25,150	26,237	28,821	30,141	31,159	30,050	30,201
Science and engineering	12,043	12,702	13,081	13,705	15,365	15,761	16,019	14,960	14,386
Engineering	6,208	6,543	6,673	6,995	8,023	8,146	8,362	7,603	7,186
Sciences	5,835	6,159	6,408	6,710	7,342	7,615	7,657	7,357	7,200
Natural sciences	4,265	4,439	4,691	5,087	5,572	5,828	5,792	5,640	5,466
Physical science [1]	954	1,028	1,070	1,111	1,118	1,236	1,222	1,187	1,140
Mathematical science	632	649	683	712	751	738	784	710	663
Computer science	1,848	1,933	2,144	2,380	2,811	2,948	2,905	2,887	2,836
Biological science	357	379	370	385	406	462	452	455	410
Agricultural science	474	450	424	499	486	444	429	401	417
Social sciences	1,570	1,720	1,717	1,623	1,770	1,787	1,865	1,717	1,734
Social science	1,471	1,584	1,613	1,528	1,659	1,657	1,717	1,593	1,607
Psychology	99	136	104	95	111	130	148	124	127
Non-S&E [2]	10,579	10,997	12,069	12,532	13,456	14,380	15,140	15,090	15,815

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

[3] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[4] Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 9. Number of earned master's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	161,651	170,922	181,603	191,908	201,220	212,246	220,230	228,572	239,497
Science and engineering	22,609	23,804	25,080	26,416	28,313	30,619	32,628	33,802	34,516
Engineering	3,081	3,268	3,357	3,665	4,093	4,421	4,631	4,752	4,694
Sciences	19,528	20,536	21,723	22,751	24,220	26,198	27,997	29,050	29,822
Natural sciences	8,839	9,035	9,139	9,295	9,637	10,056	10,366	11,168	11,368
Physical science [1]	1,523	1,430	1,457	1,457	1,562	1,658	1,735	1,886	1,821
Mathematical science	1,370	1,476	1,486	1,562	1,616	1,567	1,641	1,569	1,545
Computer science	2,626	2,675	2,761	2,646	2,756	2,694	2,702	2,723	2,855
Biological science	2,462	2,500	2,491	2,500	2,433	2,742	2,807	3,282	3,449
Agricultural science	858	954	944	1,130	1,270	1,395	1,481	1,708	1,698
Social sciences	10,689	11,501	12,584	13,456	14,583	16,142	17,631	17,882	18,454
Social science	4,851	5,218	5,776	6,180	6,605	7,285	7,520	7,848	7,881
Psychology	5,838	6,283	6,808	7,276	7,978	8,857	10,111	10,034	10,573
Non-S&E [2]	139,042	147,118	156,523	165,492	172,907	181,627	187,602	194,770	204,981
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	152,150	160,019	169,142	178,493	185,932	195,881	202,633	210,372	220,221
Science and engineering	19,509	20,168	21,112	22,114	23,528	25,501	27,326	28,183	28,814
Engineering	2,542	2,572	2,510	2,761	2,997	3,210	3,297	3,360	3,246
Sciences	16,967	17,596	18,602	19,353	20,531	22,291	24,029	24,823	25,568
Natural sciences	7,182	7,144	7,096	7,066	7,147	7,466	7,823	8,483	8,679
Physical science [1]	1,239	1,094	1,023	1,030	1,078	1,124	1,202	1,338	1,315
Mathematical science	1,026	1,090	1,110	1,162	1,229	1,210	1,269	1,198	1,207
Computer science	2,032	2,045	2,086	1,857	1,788	1,730	1,727	1,739	1,756
Biological science	2,183	2,150	2,112	2,090	1,990	2,271	2,379	2,760	2,951
Agricultural science	702	765	765	927	1,062	1,131	1,246	1,448	1,450
Social sciences	9,785	10,452	11,506	12,287	13,384	14,825	16,206	16,340	16,889
Social science	4,107	4,418	4,911	5,218	5,627	6,199	6,431	6,621	6,606
Psychology	5,678	6,034	6,595	7,069	7,757	8,626	9,775	9,719	10,283
Non-S&E [2]	132,641	139,851	148,030	156,379	162,404	170,380	175,307	182,189	191,407
	White, non-Hispanics								
Total, all Fields	126,280	130,799	139,607	146,265	151,951	157,155	160,782	165,154	170,411
Science and engineering	15,830	16,200	16,879	17,536	18,482	19,865	20,953	21,200	21,358
Engineering	1,958	1,937	1,893	1,977	2,143	2,237	2,240	2,190	2,105
Sciences	13,872	14,263	14,986	15,559	16,339	17,628	18,713	19,010	19,253
Natural sciences	5,723	5,626	5,514	5,461	5,485	5,560	5,758	6,243	6,243
Physical science [1]	1,016	883	830	833	849	893	923	1,038	1,001
Mathematical science	859	894	899	947	1,022	959	988	901	906
Computer science	1,356	1,377	1,377	1,171	1,138	977	974	943	890
Biological science	1,849	1,790	1,724	1,685	1,551	1,810	1,849	2,122	2,234
Agricultural science	643	682	684	825	925	921	1,024	1,239	1,212
Social sciences	8,149	8,637	9,472	10,098	10,854	12,068	12,955	12,767	13,010
Social science	3,366	3,579	3,919	4,247	4,470	4,878	4,950	5,049	4,922
Psychology	4,783	5,058	5,553	5,851	6,384	7,190	8,005	7,718	8,088
Non-S&E [2]	110,450	114,599	122,728	128,729	133,469	137,290	139,829	143,954	149,053

See explanatory information and SOURCE at end of table.

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Table 9. Number of earned master's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	4,257	4,324	4,850	5,470	6,044	6,768	7,521	8,404	9,327
Science and engineering	1,161	1,256	1,351	1,487	1,609	1,861	1,950	2,216	2,392
Engineering	293	306	323	407	441	511	549	621	561
Sciences	868	950	1,028	1,080	1,168	1,350	1,401	1,595	1,831
Natural sciences	627	653	704	747	769	880	921	1,044	1,163
Physical science[1]	99	94	86	89	99	102	101	136	140
Mathematical science	61	78	81	98	76	107	105	103	123
Computer science	329	332	387	400	396	443	454	462	513
Biological science	118	128	127	139	169	181	208	282	314
Agricultural science	20	21	23	21	29	47	53	61	73
Social sciences	241	297	324	333	399	470	480	551	668
Social science	154	180	201	212	258	274	261	299	380
Psychology	87	117	123	121	141	196	219	252	288
Non-S&E[2]	3,096	3,068	3,499	3,983	4,435	4,907	5,571	6,188	6,935
	Underrepresented minorities, total								
Total, all Fields	13,631	14,697	16,459	18,228	19,709	22,587	24,417	26,940	29,545
Science and engineering	1,456	1,610	1,897	2,020	2,262	2,672	3,080	3,355	3,661
Engineering	171	181	195	221	271	316	337	383	408
Sciences	1,285	1,429	1,702	1,799	1,991	2,356	2,743	2,972	3,253
Natural sciences	386	392	531	530	594	670	720	768	851
Physical science[1]	55	64	58	65	89	90	110	108	128
Mathematical science	41	53	82	55	82	79	115	108	107
Computer science	126	119	181	197	176	215	200	229	234
Biological science	138	124	170	170	180	172	213	236	280
Agricultural science	26	32	40	43	67	114	82	87	102
Social sciences	899	1,037	1,171	1,269	1,397	1,686	2,023	2,204	2,402
Social science	361	439	549	562	610	751	841	909	910
Psychology	538	598	622	707	787	935	1,182	1,295	1,492
Non-S&E[2]	12,175	13,087	14,562	16,208	17,447	19,915	21,337	23,585	25,884
	Black, non-Hispanics								
Total, all Fields	8,491	9,304	10,238	11,626	12,425	13,929	15,318	16,590	18,504
Science and engineering	774	897	1,062	1,190	1,301	1,473	1,805	1,953	2,200
Engineering	93	100	99	134	157	167	201	210	225
Sciences	681	797	963	1,056	1,144	1,306	1,604	1,743	1,975
Natural sciences	205	220	306	317	330	386	447	465	526
Physical science[1]	22	26	30	32	47	53	61	57	70
Mathematical science	27	33	47	33	50	47	87	73	80
Computer science	79	92	133	141	115	160	148	174	169
Biological science	65	59	79	88	88	94	112	122	167
Agricultural science	12	10	17	23	30	32	39	39	40
Social sciences	476	577	657	739	814	920	1,157	1,278	1,449
Social science	201	239	332	345	385	445	512	574	584
Psychology	275	338	325	394	429	475	645	704	865
Non-S&E[2]	7,717	8,407	9,176	10,436	11,124	12,456	13,513	14,637	16,304

See explanatory information and SOURCE at end of table.

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Table 9. Number of earned master's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	4,536	4,782	5,560	5,875	6,496	7,694	8,180	9,322	9,894
Science and engineering	615	628	744	740	837	1,087	1,127	1,252	1,306
Engineering	74	73	90	80	101	137	133	168	176
Sciences	541	555	654	660	736	950	994	1,084	1,130
Natural sciences	162	156	200	194	233	266	242	275	285
Physical science[1]	27	35	23	29	38	34	41	47	53
Mathematical science	13	18	33	19	28	31	22	34	21
Computer science	44	25	44	51	58	49	47	48	56
Biological science	64	59	82	77	75	73	92	106	101
Agricultural science	14	19	18	18	34	79	40	40	54
Social sciences	379	399	454	466	503	684	752	809	845
Social science	137	163	187	178	192	267	270	276	282
Psychology	242	236	267	288	311	417	482	533	563
Non-S&E[2]	3,921	4,154	4,816	5,135	5,659	6,607	7,053	8,070	8,588
	American Indians or Alaskan Natives								
Total, all Fields	604	611	661	727	788	964	919	1,028	1,147
Science and engineering	67	85	91	90	124	112	148	150	155
Engineering	4	8	6	7	13	12	3	5	7
Sciences	63	77	85	83	111	100	145	145	148
Natural sciences	19	16	25	19	31	18	31	28	40
Physical science[1]	6	3	5	4	4	3	8	4	5
Mathematical science	1	2	2	3	4	1	6	1	6
Computer science	3	2	4	5	3	6	5	7	9
Biological science	9	6	9	5	17	5	9	8	12
Agricultural science	0	3	5	2	3	3	3	8	8
Social sciences	44	61	60	64	80	82	114	117	108
Social science	23	37	30	39	33	39	59	59	44
Psychology	21	24	30	25	47	43	55	58	64
Non-S&E[2]	537	526	570	637	664	852	771	878	992
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	7,982	10,199	8,226	8,530	8,228	9,371	9,913	9,874	10,938
Science and engineering	1,062	1,102	985	1,071	1,175	1,103	1,343	1,412	1,403
Engineering	120	148	99	156	142	146	171	166	172
Sciences	942	954	886	915	1,033	957	1,172	1,246	1,231
Natural sciences	446	473	347	328	299	356	424	428	422
Physical science[1]	69	53	49	43	41	39	68	56	46
Mathematical science	65	65	48	62	49	65	61	86	71
Computer science	221	217	141	89	78	95	99	105	119
Biological science	78	108	91	96	90	108	109	120	123
Agricultural science	13	30	18	38	41	49	87	61	63
Social sciences	496	481	539	587	734	601	748	818	809
Social science	226	220	242	197	289	296	379	364	394
Psychology	270	261	297	390	445	305	369	454	415
Non-S&E[2]	6,920	9,097	7,241	7,459	7,053	8,268	8,570	8,462	9,535

See explanatory information and SOURCE at end of table.

Table 9. Number of earned master's degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	9,501	10,903	12,461	13,415	15,288	16,365	17,597	18,200	19,276
Science and engineering	3,100	3,636	3,968	4,302	4,785	5,118	5,302	5,619	5,702
Engineering	539	696	847	904	1,096	1,211	1,334	1,392	1,448
Sciences	2,561	2,940	3,121	3,398	3,689	3,907	3,968	4,227	4,254
Natural sciences	1,657	1,891	2,043	2,229	2,490	2,590	2,543	2,685	2,689
Physical science [1]	284	336	434	427	484	534	533	548	506
Mathematical science	344	386	376	400	387	357	372	371	338
Computer science	594	630	675	789	968	964	975	984	1,099
Biological science	279	350	379	410	443	471	428	522	498
Agricultural science	156	189	179	203	208	264	235	260	248
Social sciences	904	1,049	1,078	1,169	1,199	1,317	1,425	1,542	1,565
Social science	744	800	865	962	978	1,086	1,089	1,227	1,275
Psychology	160	249	213	207	221	231	336	315	290
Non-S&E [2]	6,401	7,267	8,493	9,113	10,503	11,247	12,295	12,581	13,574

1 In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

2 Non-S&E refers to non-science and non-engineering.

3 Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

4 Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics' Integrated Postsecondary Education Data System Completions Survey.

Table 10. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	34,327	36,067	37,534	38,890	39,801	41,034	41,743	42,414	42,555
Science and engineering	21,732	22,868	24,023	24,675	25,443	26,205	26,535	27,229	27,180
Engineering	4,543	4,894	5,214	5,438	5,698	5,822	6,008	6,305	6,098
Sciences	17,189	17,974	18,809	19,237	19,745	20,383	20,527	20,924	21,082
Natural sciences	10,657	11,361	12,003	12,364	12,556	13,103	13,220	13,434	13,422
Physical science [1]	3,984	4,262	4,441	4,575	4,470	4,801	4,621	4,631	4,637
Mathematical science	859	892	1,039	1,058	1,146	1,118	1,190	1,122	1,125
Computer science	612	705	800	869	880	903	997	921	905
Biological science	4,116	4,328	4,650	4,799	5,092	5,203	5,376	5,723	5,777
Agricultural science	1,086	1,174	1,073	1,063	968	1,078	1,036	1,037	978
Social sciences	6,532	6,613	6,806	6,873	7,189	7,280	7,307	7,490	7,660
Social science	3,324	3,332	3,556	3,610	3,769	3,901	3,878	3,999	4,094
Psychology	3,208	3,281	3,250	3,263	3,420	3,379	3,429	3,491	3,566
Non-S&E [2]	12,595	13,199	13,511	14,215	14,358	14,829	15,208	15,185	15,375
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	25,027	26,603	27,430	27,990	28,708	30,894	32,059	31,506	30,862
Science and engineering	14,592	15,364	15,914	15,942	16,573	18,187	18,996	18,628	18,250
Engineering	2,229	2,346	2,474	2,520	2,697	3,053	3,342	3,383	3,303
Sciences	12,363	13,018	13,440	13,422	13,876	15,134	15,654	15,245	14,947
Natural sciences	7,453	7,768	8,032	8,035	8,191	9,306	9,749	9,226	8,997
Physical science [1]	2,678	2,876	2,918	2,898	2,834	3,402	3,435	3,126	3,082
Mathematical science	428	422	518	507	590	657	771	646	619
Computer science	396	403	451	489	509	543	616	513	513
Biological science	3,300	3,380	3,525	3,568	3,752	4,088	4,329	4,365	4,234
Agricultural science	651	687	620	573	506	616	598	576	549
Social sciences	4,910	5,250	5,408	5,387	5,685	5,828	5,905	6,019	5,950
Social science	2,173	2,258	2,390	2,401	2,524	2,692	2,721	2,793	2,842
Psychology	2,737	2,992	3,018	2,986	3,161	3,136	3,184	3,226	3,108
Non-S&E [2]	10,435	11,239	11,516	12,048	12,135	12,707	13,063	12,878	12,612
	White, non-Hispanics								
Total, all Fields	21,570	22,878	23,185	23,625	24,052	24,594	24,719	24,685	23,813
Science and engineering	12,501	13,170	13,323	13,326	13,737	13,889	13,902	13,999	13,717
Engineering	1,726	1,840	1,837	1,880	2,025	2,020	2,090	2,260	2,267
Sciences	10,775	11,330	11,486	11,446	11,712	11,869	11,812	11,739	11,450
Natural sciences	6,488	6,789	6,885	6,822	6,836	7,003	6,966	6,786	6,734
Physical science [1]	2,326	2,502	2,525	2,458	2,366	2,529	2,386	2,337	2,352
Mathematical science	369	372	419	425	476	479	535	478	473
Computer science	319	339	355	378	410	401	453	356	357
Biological science	2,904	2,975	3,041	3,068	3,146	3,107	3,119	3,171	3,140
Agricultural science	570	601	545	493	438	487	473	444	412
Social sciences	4,287	4,541	4,601	4,624	4,876	4,866	4,846	4,953	4,716
Social science	1,834	1,893	1,949	1,988	2,069	2,136	2,119	2,212	2,215
Psychology	2,453	2,648	2,652	2,636	2,807	2,730	2,727	2,741	2,501
Non-S&E [2]	9,069	9,708	9,862	10,299	10,315	10,705	10,817	10,686	10,096

See explanatory information and SOURCE at end of table.

Table 10. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	1,268	1,306	1,531	1,764	2,017	3,546	4,309	3,697	3,110
Science and engineering	986	1,009	1,180	1,345	1,610	2,989	3,671	3,091	2,533
Engineering	361	359	405	451	527	867	1,033	895	707
Sciences	625	650	775	894	1,083	2,122	2,638	2,196	1,826
Natural sciences	479	486	597	698	842	1,740	2,203	1,801	1,462
Physical science[1]	179	179	189	254	287	689	855	581	475
Mathematical science	24	27	57	52	79	142	208	140	99
Computer science	52	48	66	86	77	117	137	111	106
Biological science	201	200	261	269	370	720	925	888	719
Agricultural science	23	32	24	37	29	72	78	81	63
Social sciences	146	164	178	196	241	382	435	395	364
Social science	91	111	119	137	168	273	313	271	238
Psychology	55	53	59	59	73	109	122	124	126
Non-S&E[2]	282	297	351	419	407	557	638	606	577
	Underrepresented minorities, total								
Total, all Fields	1,751	1,984	2,165	2,174	2,373	2,452	2,687	2,749	2,824
Science and engineering	802	885	1,012	990	1,054	1,112	1,200	1,295	1,348
Engineering	87	98	121	131	118	126	158	186	210
Sciences	715	787	891	859	936	986	1,042	1,109	1,138
Natural sciences	314	329	375	374	418	475	470	501	524
Physical science[1]	119	122	129	132	146	157	141	157	154
Mathematical science	19	15	20	18	25	26	22	19	26
Computer science	7	6	21	15	14	18	17	32	22
Biological science	135	144	169	177	196	226	250	250	266
Agricultural science	34	42	36	32	37	48	40	43	56
Social sciences	401	458	516	485	518	511	572	608	614
Social science	200	215	251	231	253	242	262	263	272
Psychology	201	243	265	254	265	269	310	345	342
Non-S&E[2]	949	1,099	1,153	1,184	1,319	1,340	1,487	1,454	1,476
	Black, non-Hispanics								
Total, all Fields	963	1,050	1,166	1,116	1,280	1,279	1,477	1,457	1,475
Science and engineering	367	374	464	408	469	500	560	576	616
Engineering	33	40	55	49	50	54	71	74	97
Sciences	334	334	409	359	419	446	489	502	519
Natural sciences	115	104	135	116	150	174	187	207	207
Physical science[1]	35	33	35	31	45	52	46	64	60
Mathematical science	8	4	11	4	8	11	5	8	7
Computer science	1	1	8	5	6	10	11	12	4
Biological science	57	51	64	62	75	79	108	98	111
Agricultural science	14	15	17	14	16	22	17	25	25
Social sciences	219	230	274	243	269	272	302	295	312
Social science	122	115	144	137	150	148	151	141	157
Psychology	97	115	130	106	119	124	151	154	155
Non-S&E[2]	596	676	702	708	811	779	917	881	859

See explanatory information and SOURCE at end of table

Table 10. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	694	837	867	909	973	1,030	1,061	1,105	1,183
Science and engineering	382	468	492	513	542	548	571	623	653
Engineering	47	54	60	71	66	66	77	98	97
Sciences	335	414	432	442	476	482	494	525	556
Natural sciences	172	212	212	228	249	274	255	255	290
Physical science[1]	68	85	81	88	92	98	86	85	83
Mathematical science	11	10	9	12	16	13	15	10	18
Computer science	4	5	12	8	7	7	6	16	17
Biological science	71	89	95	102	114	131	127	131	146
Agricultural science	18	23	15	18	20	25	21	13	26
Social sciences	163	202	220	214	227	208	239	270	266
Social science	70	93	98	81	96	75	94	97	97
Psychology	93	109	122	133	131	133	145	173	169
Non-S&E[2]	312	369	375	396	431	482	490	482	530
	American Indians or Alaskan Natives								
Total, all Fields	94	97	132	149	120	143	149	187	166
Science and engineering	53	43	56	69	43	64	69	96	79
Engineering	7	4	6	11	2	6	10	14	16
Sciences	46	39	50	58	41	58	59	82	63
Natural sciences	27	13	28	30	19	27	28	39	27
Physical science[1]	16	4	13	13	9	7	9	8	11
Mathematical science	0	1	0	2	1	2	2	1	1
Computer science	2	0	1	2	1	1	0	4	1
Biological science	7	4	10	13	7	16	15	21	9
Agricultural science	2	4	4	0	1	1	2	5	5
Social sciences	19	26	22	28	22	31	31	43	36
Social science	8	7	9	13	7	19	17	25	18
Psychology	11	19	13	15	15	12	14	18	18
Non-S&E[2]	41	54	76	80	77	79	80	91	87
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	438	435	549	427	266	302	344	375	1,115
Science and engineering	303	300	399	281	172	197	223	243	652
Engineering	55	49	111	58	27	40	61	42	119
Sciences	248	251	288	223	145	157	162	201	533
Natural sciences	172	164	175	141	95	88	110	138	277
Physical science[1]	54	73	75	54	35	27	53	51	101
Mathematical science	16	8	22	12	10	10	6	9	21
Computer science	18	10	9	10	8	7	9	14	28
Biological science	60	61	54	54	40	35	35	56	109
Agricultural science	24	12	15	11	2	9	7	8	18
Social sciences	76	87	113	82	50	69	52	63	256
Social science	48	39	71	45	34	41	27	47	117
Psychology	28	48	42	37	16	28	25	16	139
Non-S&E[2]	135	135	150	146	94	105	121	132	463

See explanatory information and SOURCE at end of table.

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Table 10. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of recipient: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	6,648	8,093	9,311	9,953	9,932	9,406	8,810	9,610	8,478
Science and engineering	5,391	6,571	7,641	8,092	8,113	7,521	6,994	7,802	6,963
Engineering	1,940	2,277	2,633	2,743	2,784	2,653	2,524	2,716	2,391
Sciences	3,451	4,294	5,008	5,349	5,329	4,868	4,470	5,086	4,572
Natural sciences	2,499	3,232	3,782	4,089	4,056	3,606	3,248	3,843	3,530
Physical science [1]	1,012	1,244	1,442	1,582	1,498	1,304	1,103	1,344	1,228
Mathematical science	346	424	506	511	517	448	382	441	416
Computer science	178	271	340	365	348	343	365	376	315
Biological science	608	853	1,059	1,159	1,246	1,058	969	1,240	1,219
Agricultural science	355	440	435	472	447	453	429	442	352
Social sciences	952	1,062	1,226	1,260	1,273	1,262	1,222	1,243	1,042
Social science	846	945	1,093	1,104	1,125	1,111	1,058	1,062	914
Psychology	106	117	133	156	148	151	164	181	128
Non-S&E [2]	1,257	1,522	1,670	1,861	1,819	1,885	1,816	1,808	1,515
	Citizenship unknown								
Total, all Fields	2,652	1,371	793	947	1,161	734	874	1,298	3,215
Science and engineering	1,749	933	468	641	757	497	545	799	1,967
Engineering	374	271	107	175	217	116	142	206	404
Sciences	1,375	662	361	466	540	381	403	593	1,563
Natural sciences	705	361	189	240	309	191	223	365	895
Physical science [1]	294	142	81	95	138	95	83	161	327
Mathematical science	85	46	15	40	39	13	37	35	90
Computer science	38	31	9	15	23	17	16	32	77
Biological science	208	95	66	72	94	57	78	118	324
Agricultural science	80	47	18	18	15	9	9	19	77
Social sciences	670	301	172	226	231	190	180	228	668
Social science	305	129	73	105	120	98	99	144	338
Psychology	365	172	99	121	111	92	81	84	330
Non-S&E [2]	903	438	325	306	404	237	329	499	1,248

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

[3] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[4] Nonresident aliens include foreign citizens on temporary visas only.

NOTE: See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies, data from NSF/SRS, Survey of Earned Doctorates.

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Table 11. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	21,814	22,961	23,661	24,454	24,679	25,215	25,329	25,469	25,304
Science and engineering	15,623	16,498	17,091	17,595	17,791	18,285	18,247	18,583	18,259
Engineering	4,168	4,479	4,747	4,932	5,176	5,187	5,312	5,529	5,351
Sciences	11,455	12,019	12,344	12,663	12,615	13,098	12,935	13,054	12,908
Natural sciences	7,858	8,430	8,847	9,017	8,936	9,362	9,275	9,353	9,202
Physical science [1]	3,217	3,460	3,583	3,617	3,530	3,790	3,573	3,617	3,578
Mathematical science	704	734	840	853	882	882	925	891	862
Computer science	504	595	683	749	742	766	811	782	756
Biological science	2,574	2,713	2,877	2,968	3,042	3,095	3,158	3,308	3,286
Agricultural science	859	928	864	830	740	829	808	755	720
Social sciences	3,597	3,589	3,497	3,646	3,679	3,736	3,660	3,701	3,706
Social science	2,189	2,221	2,243	2,311	2,347	2,458	2,411	2,538	2,509
Psychology	1,408	1,368	1,254	1,335	1,332	1,278	1,249	1,163	1,197
Non-S&E [2]	6,191	6,463	6,570	6,859	6,888	6,930	7,082	6,886	7,045
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	14,535	15,355	15,612	15,812	15,988	17,372	17,876	17,183	16,776
Science and engineering	9,671	10,182	10,317	10,365	10,549	11,693	12,083	11,668	11,312
Engineering	1,954	2,070	2,158	2,192	2,349	2,605	2,822	2,860	2,794
Sciences	7,717	8,112	8,159	8,173	8,200	9,088	9,261	8,808	8,518
Natural sciences	5,271	5,526	5,688	5,586	5,559	6,389	6,576	6,134	5,916
Physical science [1]	2,121	2,288	2,307	2,237	2,193	2,633	2,583	2,386	2,337
Mathematical science	327	329	406	390	426	506	588	501	447
Computer science	312	313	357	406	400	449	473	422	414
Biological science	2,024	2,068	2,135	2,130	2,168	2,345	2,469	2,424	2,325
Agricultural science	487	528	483	423	372	456	463	401	393
Social sciences	2,446	2,586	2,471	2,587	2,641	2,699	2,685	2,674	2,602
Social science	1,272	1,366	1,343	1,381	1,418	1,530	1,557	1,631	1,587
Psychology	1,174	1,220	1,128	1,206	1,223	1,169	1,128	1,043	1,015
Non-S&E [2]	4,864	5,173	5,295	5,447	5,439	5,679	5,793	5,515	5,464
	White, non-Hispanics								
Total, all Fields	12,428	13,160	13,153	13,279	13,348	13,558	13,534	13,228	12,911
Science and engineering	8,213	8,648	8,584	8,623	8,725	8,731	8,680	8,646	8,496
Engineering	1,502	1,614	1,602	1,640	1,764	1,715	1,770	1,913	1,937
Sciences	6,711	7,034	6,982	6,983	6,961	7,016	6,910	6,733	6,559
Natural sciences	4,580	4,836	4,910	4,779	4,705	4,810	4,730	4,542	4,493
Physical science [1]	1,842	2,008	2,000	1,927	1,868	1,998	1,831	1,797	1,816
Mathematical science	281	293	335	332	352	361	409	373	342
Computer science	252	259	282	309	327	326	349	295	292
Biological science	1,784	1,821	1,871	1,847	1,835	1,758	1,772	1,770	1,750
Agricultural science	421	455	422	364	323	367	369	307	293
Social sciences	2,131	2,198	2,072	2,204	2,256	2,206	2,180	2,191	2,066
Social science	1,066	1,123	1,081	1,126	1,160	1,177	1,198	1,286	1,238
Psychology	1,065	1,075	991	1,078	1,096	1,029	982	905	828
Non-S&E [2]	4,215	4,512	4,569	4,656	4,623	4,827	4,854	4,582	4,415

See explanatory information and SOURCE at end of table

Table 11. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	905	909	972	1,136	1,287	2,469	2,869	2,398	1,884
Science and engineering	745	757	806	927	1,079	2,169	2,557	2,108	1,640
Engineering	327	326	356	390	466	748	863	762	589
Sciences	418	431	450	537	613	1,421	1,694	1,346	1,051
Natural sciences	331	336	373	434	501	1,214	1,458	1,154	888
Physical science[1]	139	136	135	166	182	494	616	424	322
Mathematical science	21	20	39	33	43	116	158	104	71
Computer science	42	41	51	74	58	101	107	95	80
Biological science	112	113	132	136	198	451	515	480	370
Agricultural science	17	26	16	25	20	52	62	51	45
Social sciences	87	95	77	103	112	207	236	192	163
Social science	59	73	62	83	90	175	192	161	131
Psychology	28	22	15	20	22	32	44	31	32
Non-S&E[2]	160	152	166	209	208	300	312	290	244
	Underrepresented minorities, total								
Total, all Fields	878	980	1,084	1,083	1,156	1,142	1,236	1,307	1,326
Science and engineering	474	540	613	588	606	642	673	736	759
Engineering	74	83	101	107	95	105	132	151	161
Sciences	400	457	512	481	511	537	541	585	598
Natural sciences	218	220	261	253	275	298	302	331	340
Physical science[1]	88	82	107	97	112	119	93	123	122
Mathematical science	12	10	12	14	22	20	16	17	18
Computer science	2	5	16	13	8	15	9	20	18
Biological science	87	88	94	105	105	114	155	135	139
Agricultural science	29	35	32	24	28	30	29	36	43
Social sciences	182	237	251	228	236	239	239	254	258
Social science	113	136	150	139	141	145	146	153	149
Psychology	69	101	101	89	95	94	93	101	109
Non-S&E[2]	404	440	471	495	550	500	563	571	567
	Black, non-Hispanics								
Total, all Fields	453	479	552	519	579	553	615	641	632
Science and engineering	214	225	270	238	261	284	290	323	327
Engineering	30	34	47	43	39	41	56	55	74
Sciences	184	191	223	195	222	243	234	268	253
Natural sciences	78	71	88	80	99	104	115	147	126
Physical science[1]	27	24	29	24	35	38	28	49	48
Mathematical science	5	3	7	4	7	8	4	6	5
Computer science	0	1	4	4	2	8	7	9	3
Biological science	33	29	32	38	43	34	65	58	51
Agricultural science	13	14	16	10	12	16	11	25	19
Social sciences	106	120	135	115	123	139	119	121	127
Social science	70	77	91	87	79	93	80	82	86
Psychology	36	43	44	28	44	46	39	39	41
Non-S&E[2]	239	254	282	281	318	269	325	318	305

See explanatory information and SOURCE at end of table

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Table 11. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	376	449	458	482	517	518	539	564	617
Science and engineering	227	290	306	308	320	318	339	351	388
Engineering	39	45	50	56	54	60	66	84	74
Sciences	188	245	256	252	266	258	273	267	314
Natural sciences	120	138	152	151	162	174	168	160	193
Physical science[1]	47	55	68	62	70	75	59	67	64
Mathematical science	7	6	5	9	14	10	11	10	12
Computer science	1	4	11	7	6	7	2	9	15
Biological science	50	56	56	59	57	69	80	65	83
Agricultural science	15	17	12	14	15	13	16	9	19
Social sciences	68	107	104	101	104	84	105	107	121
Social science	38	55	52	46	59	41	57	54	59
Psychology	30	52	52	55	45	43	48	53	62
Non-S&E[2]	149	159	152	174	197	200	200	213	229
	American Indians or Alaskan Natives								
Total, all Fields	49	52	74	82	60	71	82	102	77
Science and engineering	33	25	37	42	25	40	44	62	44
Engineering	5	4	4	8	2	4	10	12	13
Sciences	28	21	33	34	23	36	34	50	31
Natural sciences	20	11	21	22	14	20	19	24	21
Physical science[1]	14	3	10	11	7	6	6	7	10
Mathematical science	0	1	0	1	1	2	1	1	1
Computer science	1	0	1	2	0	0	0	2	0
Biological science	4	3	6	8	5	11	10	12	5
Agricultural science	1	4	4	0	1	1	2	2	5
Social sciences	8	10	12	12	9	16	15	26	10
Social science	5	4	7	6	3	11	9	17	4
Psychology	3	6	5	6	6	5	6	9	6
Non-S&E[2]	16	27	37	40	35	31	38	40	33
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	324	306	403	314	197	203	237	250	655
Science and engineering	239	237	314	227	139	151	173	178	417
Engineering	51	47	99	55	24	37	57	34	107
Sciences	188	190	215	172	115	114	116	144	310
Natural sciences	142	134	144	120	78	67	86	107	195
Physical science[1]	52	62	65	47	31	22	43	42	77
Mathematical science	13	6	20	11	9	9	5	7	16
Computer science	16	8	8	10	7	7	8	12	24
Biological science	41	46	38	42	30	22	27	39	66
Agricultural science	20	12	13	10	1	7	3	7	12
Social sciences	46	56	71	52	37	47	30	37	115
Social science	34	34	50	33	27	33	21	31	69
Psychology	12	22	21	19	10	14	9	6	46
Non-S&E[2]	85	69	89	87	58	52	64	72	238

See explanatory information and SOURCE at end of table.

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Table 11. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of male recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	5,444	6,632	7,517	7,963	7,863	7,330	6,858	7,395	6,463
Science and engineering	4,609	5,590	6,412	6,741	6,658	6,201	5,748	6,305	5,565
Engineering	1,850	2,157	2,484	2,574	2,623	2,475	2,365	2,488	2,194
Sciences	2,759	3,433	3,928	4,167	4,035	3,726	3,383	3,817	3,371
Natural sciences	2,011	2,608	3,003	3,230	3,127	2,802	2,522	2,931	2,638
Physical science [1]	852	1,048	1,206	1,296	1,217	1,066	921	1,099	995
Mathematical science	299	363	420	427	422	364	304	358	345
Computer science	160	256	317	329	322	302	322	335	279
Biological science	400	582	694	787	809	704	635	799	748
Agricultural science	300	359	366	391	357	366	340	340	271
Social sciences	748	825	925	937	908	924	861	886	733
Social science	688	763	848	856	844	853	782	799	678
Psychology	60	62	77	81	64	71	79	87	55
Non-S&E [2]	835	1,042	1,105	1,222	1,205	1,129	1,110	1,090	898
	Citizenship unknown								
Total, all Fields	1,835	974	532	679	828	513	595	891	2,065
Science and engineering	1,343	726	362	489	584	391	416	610	1,382
Engineering	364	252	105	166	204	107	125	181	363
Sciences	979	474	257	323	380	284	291	429	1,019
Natural sciences	576	296	156	201	250	171	177	288	648
Physical science [1]	244	124	70	84	120	91	69	132	246
Mathematical science	78	42	14	36	34	12	33	32	70
Computer science	32	26	9	14	20	15	16	25	63
Biological science	150	63	48	51	65	46	54	85	213
Agricultural science	72	41	15	16	11	7	5	14	56
Social sciences	403	178	101	122	130	113	114	141	371
Social science	229	92	52	74	85	75	72	108	244
Psychology	174	86	49	48	45	38	42	33	127
Non-S&E [2]	492	248	170	190	244	122	179	281	683

1 In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

2 Non-S&E refers to non-science and non-engineering.

3 Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

4 Nonresident aliens include foreign citizens on temporary visas only.

NOTE: See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS, Survey of Earned Doctorates.

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Table 12. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total, all Fields	12,513	13,106	13,873	14,436	15,122	15,819	16,414	16,945	17,251
Science and engineering	6,109	6,370	6,932	7,080	7,652	7,920	8,288	8,646	8,921
Engineering	375	415	467	506	522	635	696	776	747
Sciences	5,734	5,955	6,465	6,574	7,130	7,285	7,592	7,870	8,174
Natural sciences	2,799	2,931	3,156	3,347	3,620	3,741	3,945	4,081	4,220
Physical science [1]	767	802	858	958	940	1,011	1,048	1,014	1,059
Mathematical science	155	158	199	205	264	236	265	231	263
Computer science	108	110	117	120	138	137	186	139	149
Biological science	1,542	1,615	1,773	1,831	2,050	2,108	2,218	2,415	2,491
Agricultural science	227	246	209	233	228	249	228	282	258
Social sciences	2,935	3,024	3,309	3,227	3,510	3,544	3,647	3,789	3,954
Social science	1,135	1,111	1,313	1,299	1,422	1,443	1,467	1,461	1,585
Psychology	1,800	1,913	1,996	1,928	2,088	2,101	2,180	2,328	2,369
Non-S&E [2]	6,404	6,736	6,941	7,356	7,470	7,899	8,126	8,299	8,330
	U.S. citizens and permanent residents, total [3]								
Total, all Fields	10,492	11,248	11,818	12,178	12,720	13,522	14,183	14,323	14,086
Science and engineering	4,921	5,182	5,597	5,577	6,024	6,494	6,913	6,960	6,938
Engineering	275	276	316	328	348	448	520	523	509
Sciences	4,646	4,906	5,281	5,249	5,676	6,046	6,393	6,437	6,429
Natural sciences	2,182	2,242	2,344	2,449	2,632	2,917	3,173	3,092	3,081
Physical science [1]	557	588	611	661	641	769	852	740	745
Mathematical science	101	93	112	117	164	151	183	145	172
Computer science	84	90	94	83	109	94	143	91	99
Biological science	1,276	1,312	1,390	1,438	1,584	1,743	1,860	1,941	1,909
Agricultural science	164	159	137	150	134	160	135	175	156
Social sciences	2,464	2,664	2,937	2,800	3,044	3,129	3,220	3,345	3,348
Social science	901	892	1,047	1,020	1,106	1,162	1,164	1,162	1,255
Psychology	1,563	1,772	1,890	1,780	1,938	1,967	2,056	2,183	2,093
Non-S&E [2]	5,571	6,066	6,221	6,601	6,696	7,028	7,270	7,363	7,148
	White, non-Hispanics								
Total, all Fields	9,142	9,718	10,032	10,346	10,704	11,036	11,185	11,457	10,902
Science and engineering	4,288	4,522	4,739	4,703	5,012	5,158	5,222	5,353	5,221
Engineering	224	226	235	240	261	305	320	347	330
Sciences	4,064	4,296	4,504	4,463	4,751	4,853	4,902	5,006	4,891
Natural sciences	1,908	1,953	1,975	2,043	2,131	2,193	2,236	2,244	2,241
Physical science [1]	484	494	525	531	498	531	555	540	536
Mathematical science	88	79	84	93	124	118	126	105	131
Computer science	67	80	73	69	83	75	104	61	65
Biological science	1,120	1,154	1,170	1,221	1,311	1,349	1,347	1,401	1,390
Agricultural science	149	146	123	129	115	120	104	137	119
Social sciences	2,156	2,343	2,529	2,420	2,620	2,660	2,666	2,762	2,650
Social science	768	770	868	862	909	959	921	926	977
Psychology	1,388	1,573	1,661	1,558	1,711	1,701	1,745	1,836	1,673
Non-S&E [2]	4,854	5,196	5,293	5,643	5,692	5,878	5,963	6,104	5,681

See explanatory information and SOURCE at end of table.

Table 12. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Asians								
Total, all Fields	363	397	559	628	730	1,077	1,440	1,299	1,226
Science and engineering	241	252	374	418	531	820	1,114	983	893
Engineering	34	33	49	61	61	119	170	133	118
Sciences	207	219	325	357	470	701	944	850	775
Natural sciences	148	150	224	264	341	526	745	647	574
Physical science[1]	40	43	54	88	105	195	239	157	153
Mathematical science	3	7	18	19	36	26	50	36	28
Computer science	10	7	15	12	19	16	30	16	26
Biological science	89	87	129	133	172	269	410	408	349
Agricultural science	6	6	8	12	9	20	16	30	18
Social sciences	59	69	101	93	129	175	199	203	201
Social science	32	38	57	54	78	98	121	110	107
Psychology	27	31	44	39	51	77	78	93	94
Non-S&E[2]	122	145	185	210	199	257	326	316	333
	Underrepresented minorities, total								
Total, all Fields	873	1,004	1,081	1,091	1,217	1,310	1,451	1,442	1,498
Science and engineering	328	345	399	402	448	470	527	559	589
Engineering	13	15	20	24	23	21	26	35	49
Sciences	315	330	379	378	425	449	501	524	540
Natural sciences	96	109	114	121	143	177	168	170	184
Physical science[1]	31	40	22	35	34	38	48	34	32
Mathematical science	7	5	8	4	3	6	6	2	8
Computer science	5	1	5	2	6	3	8	12	4
Biological science	48	56	75	72	91	112	95	115	127
Agricultural science	5	7	4	8	9	18	11	7	13
Social sciences	219	221	265	257	282	272	333	354	356
Social science	87	79	101	92	112	97	116	110	123
Psychology	132	142	164	165	170	175	217	244	233
Non-S&E[2]	545	659	682	689	769	840	924	883	909
	Black, non-Hispanics								
Total, all Fields	510	571	614	597	701	726	862	816	843
Science and engineering	153	149	194	170	208	216	270	253	289
Engineering	3	6	8	6	11	13	15	19	23
Sciences	150	143	186	164	197	203	255	234	266
Natural sciences	37	33	47	36	51	70	72	60	81
Physical science[1]	8	9	6	7	10	14	18	15	12
Mathematical science	3	1	4	0	1	3	1	2	2
Computer science	1	0	4	1	4	2	4	3	1
Biological science	24	22	32	24	32	45	43	40	60
Agricultural science	1	1	1	4	4	6	6	0	6
Social sciences	113	110	139	128	146	133	183	174	185
Social science	52	38	53	50	71	55	71	59	71
Psychology	61	72	86	78	75	78	112	115	114
Non-S&E[2]	357	422	420	427	493	510	592	563	554

See explanatory information and SOURCE at end of table.

Table 12. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Hispanics								
Total, all Fields	318	388	409	427	456	512	522	541	566
Science and engineering	155	178	186	205	222	230	232	272	265
Engineering	8	9	10	15	12	6	11	14	23
Sciences	147	169	176	190	210	224	221	258	242
Natural sciences	52	74	60	77	87	100	87	95	97
Physical science [1]	21	30	13	26	22	23	27	18	19
Mathematical science	4	4	4	3	2	3	4	0	6
Computer science	3	1	1	1	1	0	4	7	2
Biological science	21	33	39	43	57	62	47	66	63
Agricultural science	3	6	3	4	5	12	5	4	7
Social sciences	95	95	116	113	123	124	134	163	145
Social science	32	38	46	35	37	34	37	43	38
Psychology	63	57	70	78	86	90	97	120	107
Non-S&E [2]	163	210	223	222	234	282	290	269	301
	American Indians or Alaskan Natives								
Total, all Fields	45	45	58	67	60	72	67	85	89
Science and engineering	20	18	19	27	18	24	25	34	35
Engineering	2	0	2	3	0	2	0	2	3
Sciences	18	18	17	24	18	22	25	32	32
Natural sciences	7	2	7	8	5	7	9	15	6
Physical science [1]	2	1	3	2	2	1	3	1	1
Mathematical science	0	0	0	1	0	0	1	0	0
Computer science	1	0	0	0	1	1	0	2	1
Biological science	3	1	4	5	2	5	5	9	4
Agricultural science	1	0	0	0	0	0	0	3	0
Social sciences	11	16	10	16	13	15	16	17	26
Social science	3	3	2	7	4	8	8	8	14
Psychology	8	13	8	9	9	7	8	9	12
Non-S&E [2]	25	27	39	40	42	48	42	51	54
	U.S. citizens and permanent residents, unknown race/ethnicity								
Total, all Fields	114	129	146	113	69	99	107	125	460
Science and engineering	64	63	85	54	33	46	50	65	235
Engineering	4	2	12	3	3	3	4	8	12
Sciences	60	61	73	51	30	43	46	57	223
Natural sciences	30	30	31	21	17	21	24	31	82
Physical science [1]	2	11	10	7	4	5	10	9	24
Mathematical science	3	2	2	1	1	1	1	2	5
Computer science	2	2	1	0	1	0	1	2	4
Biological science	19	15	16	12	10	13	8	17	43
Agricultural science	4	0	2	1	1	2	4	1	6
Social sciences	30	31	42	30	13	22	22	26	141
Social science	14	5	21	12	7	8	6	16	48
Psychology	16	26	21	18	6	14	16	10	93
Non-S&E [2]	50	66	61	59	36	53	57	60	225

See explanatory information and SOURCE at end of table.

Table 12. Number of earned doctoral degrees, by field and by citizenship and race/ethnicity of female recipients: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Nonresident aliens [4]								
Total, all Fields	1,204	1,461	1,794	1,990	2,069	2,076	1,952	2,215	2,015
Science and engineering	782	981	1,229	1,351	1,455	1,320	1,246	1,497	1,398
Engineering	90	120	149	169	161	178	159	228	197
Sciences	692	861	1,080	1,182	1,294	1,142	1,087	1,269	1,201
Natural sciences	488	624	779	859	929	804	726	912	892
Physical science [1]	160	196	236	286	281	238	182	245	233
Mathematical science	47	61	86	84	95	84	78	83	71
Computer science	18	15	23	36	26	41	43	41	36
Biological science	208	271	365	372	437	354	334	441	471
Agricultural science	55	81	69	81	90	87	89	102	81
Social sciences	204	237	301	323	365	338	361	357	309
Social science	158	182	245	248	281	258	276	263	236
Psychology	46	55	56	75	84	80	85	94	73
Non-S&E [2]	422	480	565	639	614	756	706	718	617
	Citizenship unknown								
Total, all Fields	817	397	261	268	333	221	279	407	1,150
Science and engineering	406	207	106	152	173	106	129	189	585
Engineering	10	19	2	9	13	9	17	25	41
Sciences	396	188	104	143	160	97	112	164	544
Natural sciences	129	65	33	39	59	20	46	77	247
Physical science [1]	50	18	11	11	18	4	14	29	81
Mathematical science	7	4	1	4	5	1	4	3	20
Computer science	6	5	0	1	3	2	0	7	14
Biological science	58	32	18	21	29	11	24	33	111
Agricultural science	8	6	3	2	4	2	4	5	21
Social sciences	267	123	71	104	101	77	66	87	297
Social science	76	37	21	31	35	23	27	36	94
Psychology	191	86	50	73	66	54	39	51	203
Non-S&E [2]	411	190	155	116	160	115	150	218	565

1 In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

2 Non-S&E refers to non-science and non-engineering.

3 Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

4 Nonresident aliens include foreign citizens on temporary visas only.

NOTE: See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS, Survey of Earned Doctorates.

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Table 13. Number and percent of bachelor's degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	56,837	59,301	65,009	71,311	76,667	82,316	85,287	89,554	92,067
Science and engineering	17,385	18,230	19,987	22,431	24,421	26,289	27,528	29,055	30,444
Engineering	2,067	2,072	2,229	2,362	2,577	2,659	2,845	3,000	3,076
Sciences	15,318	16,158	17,758	20,069	21,844	23,630	24,683	26,055	27,368
Natural sciences	6,005	5,782	5,834	6,401	6,972	7,559	8,021	8,670	9,061
Physical science[1]	697	650	753	816	836	921	1,034	1,100	1,110
Mathematical science	792	720	811	904	965	992	995	981	1,071
Computer science	2,457	2,247	1,997	2,090	2,213	2,398	2,498	2,415	2,370
Biological science	1,916	1,994	2,111	2,385	2,739	2,980	3,231	3,811	4,123
Agricultural science	143	171	162	206	219	268	263	363	387
Social sciences	9,313	10,376	11,924	13,668	14,872	16,071	16,662	17,385	18,307
Social science	6,570	7,226	8,236	9,489	10,254	10,835	10,921	11,357	11,660
Psychology	2,743	3,150	3,688	4,179	4,618	5,236	5,741	6,028	6,647
Non-S&E[2]	39,452	41,071	45,022	48,880	52,246	56,027	57,759	60,499	61,623
	Black recipients from HBCUs								
Total, all Fields	15,925	16,345	17,963	19,709	21,849	23,426	23,989	25,425	25,215
Science and engineering	5,054	5,190	5,679	6,363	7,368	7,804	8,361	8,980	9,071
Engineering	474	524	589	594	700	690	798	894	905
Sciences	4,580	4,666	5,090	5,769	6,668	7,114	7,563	8,086	8,166
Natural sciences	2,513	2,353	2,363	2,599	3,021	3,105	3,384	3,794	3,872
Physical science[1]	320	296	358	376	390	421	471	547	503
Mathematical science	381	307	369	420	463	449	466	443	478
Computer science	1,048	899	748	780	904	904	967	979	934
Biological science	693	764	792	906	1,155	1,197	1,357	1,628	1,841
Agricultural science	71	87	96	117	109	134	123	197	216
Social sciences	2,067	2,313	2,727	3,170	3,647	4,009	4,179	4,292	4,294
Social science	1,517	1,651	1,886	2,201	2,507	2,701	2,747	2,780	2,641
Psychology	550	662	841	969	1,140	1,308	1,432	1,512	1,653
Non-S&E[2]	10,871	11,155	12,284	13,346	14,481	15,622	15,628	16,445	16,144
	Percent from HBCUs								
Total, all Fields	28.0	27.6	27.6	27.6	28.5	28.5	28.1	28.4	27.4
Science and engineering	29.1	28.5	28.4	28.4	30.2	29.7	30.4	30.9	29.8
Engineering	22.9	25.3	26.4	25.1	27.2	25.9	28.0	29.8	29.4
Sciences	29.9	28.9	28.7	28.7	30.5	30.1	30.6	31.0	29.8
Natural sciences	41.8	40.7	40.5	40.6	43.3	41.1	42.2	43.8	42.7
Physical science[1]	45.9	45.5	47.5	46.1	46.7	45.7	45.6	49.7	45.3
Mathematical science	48.1	42.6	45.5	46.5	48.0	45.3	46.8	45.2	44.6
Computer science	42.7	40.0	37.5	37.3	40.8	37.7	38.7	40.5	35.2
Biological science	36.2	38.3	37.5	38.0	42.2	40.2	42.0	42.7	44.7
Agricultural science	49.7	50.9	59.3	56.8	49.8	50.0	46.8	54.3	55.8
Social sciences	22.2	22.3	22.9	23.2	24.5	24.9	25.1	24.7	23.5
Social science	23.1	22.8	22.9	23.2	24.4	24.9	25.2	24.5	22.7
Psychology	20.1	21.0	22.8	23.2	24.7	25.0	24.9	25.1	24.9
Non-S&E[2]	27.6	27.2	27.3	27.3	27.7	27.9	27.1	27.2	26.2

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System Completions Survey.

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Table 14. Number and percent of bachelor's degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	21,913	22,590	24,238	26,518	28,374	30,106	30,998	32,223	32,726
Science and engineering	7,685	7,830	8,448	9,375	10,099	10,806	11,127	11,700	11,947
Engineering	1,397	1,416	1,484	1,614	1,764	1,784	1,846	1,964	2,019
Sciences	6,288	6,414	6,964	7,761	8,335	9,022	9,281	9,736	9,928
Natural sciences	2,732	2,476	2,538	2,709	2,872	3,146	3,314	3,591	3,678
Physical science[1]	365	292	391	381	370	464	495	482	466
Mathematical science	374	342	380	374	444	457	476	468	510
Computer science	1,205	1,074	971	1,092	1,049	1,161	1,241	1,218	1,212
Biological science	700	658	696	749	883	927	981	1,236	1,304
Agricultural science	88	110	100	113	126	137	121	187	186
Social sciences	3,556	3,938	4,426	5,052	5,463	5,876	5,967	6,145	6,250
Social science	2,911	3,144	3,547	4,070	4,364	4,644	4,565	4,727	4,659
Psychology	645	794	879	982	1,099	1,232	1,402	1,418	1,591
Non-S&E[2]	14,228	14,760	15,790	17,143	18,275	19,300	19,871	20,523	20,779
	Black recipients from HBCUs								
Total, all Fields	5,982	6,066	6,430	7,087	7,867	8,457	8,587	9,094	8,933
Science and engineering	2,112	2,086	2,211	2,450	2,761	2,940	3,190	3,467	3,425
Engineering	308	331	359	380	430	425	500	544	534
Sciences	1,804	1,755	1,852	2,070	2,331	2,515	2,690	2,923	2,891
Natural sciences	1,056	935	951	972	1,089	1,162	1,260	1,444	1,418
Physical science[1]	160	127	163	145	150	197	202	202	162
Mathematical science	179	134	164	150	196	181	204	206	223
Computer science	460	377	333	364	361	381	411	442	378
Biological science	206	231	231	238	317	334	385	482	543
Agricultural science	51	66	60	75	65	69	58	112	112
Social sciences	748	820	901	1,098	1,242	1,353	1,430	1,479	1,473
Social science	621	657	720	868	989	1,060	1,080	1,119	1,045
Psychology	127	163	181	230	253	293	350	360	428
Non-S&E[2]	3,870	3,980	4,219	4,637	5,106	5,517	5,397	5,627	5,508
	Percent from HBCUs								
Total, all Fields	27.3	26.9	26.5	26.7	27.7	28.1	27.7	28.2	27.3
Science and engineering	27.5	26.6	26.2	26.1	27.3	27.2	28.7	29.6	28.7
Engineering	22.0	23.4	24.2	23.5	24.4	23.8	27.1	27.7	26.4
Sciences	28.7	27.4	26.6	26.7	28.0	27.9	29.0	30.0	29.1
Natural sciences	38.7	37.8	37.5	35.9	37.9	36.9	38.0	40.2	38.6
Physical science[1]	43.8	43.5	41.7	38.1	40.5	42.5	40.8	41.9	34.8
Mathematical science	47.9	39.2	43.2	40.1	44.1	39.6	42.9	44.0	43.7
Computer science	38.2	35.1	34.3	33.3	34.4	32.8	33.1	36.3	31.2
Biological science	29.4	35.1	33.2	31.8	35.9	36.0	39.2	39.0	41.6
Agricultural science	58.0	60.0	60.0	66.4	51.6	50.4	47.9	59.9	60.2
Social sciences	21.0	20.8	20.4	21.7	22.7	23.0	24.0	24.1	23.6
Social science	21.3	20.9	20.3	21.3	22.7	22.8	23.7	23.7	22.4
Psychology	19.7	20.5	20.6	23.4	23.0	23.8	25.0	25.4	26.9
Non-S&E[2]	27.2	27.0	26.7	27.0	27.9	28.6	27.2	27.4	26.5

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics' Integrated Postsecondary Education Data System Completions Survey

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Table 15. Number and percent of bachelor's degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	34,924	36,711	40,771	44,793	48,293	52,210	54,289	57,331	59,341
Science and engineering	9,700	10,400	11,539	13,056	14,322	15,483	16,401	17,355	18,497
Engineering	670	656	745	748	813	875	999	1,036	1,057
Sciences	9,030	9,744	10,794	12,308	13,509	14,608	15,402	16,319	17,440
Natural sciences	3,273	3,306	3,296	3,692	4,100	4,413	4,707	5,079	5,383
Physical science[1]	332	358	362	435	460	457	539	618	644
Mathematical science	418	378	431	530	521	535	519	513	561
Computer science	1,252	1,173	1,026	998	1,164	1,237	1,257	1,197	1,158
Biological science	1,216	1,336	1,415	1,636	1,856	2,053	2,250	2,575	2,819
Agricultural science	55	61	62	93	93	131	142	176	201
Social sciences	5,757	6,438	7,498	8,616	9,409	10,195	10,695	11,240	12,057
Social science	3,659	4,082	4,689	5,419	5,890	6,191	6,356	6,630	7,001
Psychology	2,098	2,356	2,809	3,197	3,519	4,004	4,339	4,610	5,056
Non-S&E[2]	25,224	26,311	29,232	31,737	33,971	36,727	37,888	39,976	40,844
	Black recipients from HBCUs								
Total, all Fields	9,943	10,279	11,533	12,622	13,982	14,969	15,402	16,331	16,282
Science and engineering	2,942	3,104	3,468	3,913	4,607	4,864	5,171	5,513	5,646
Engineering	166	193	230	214	270	265	298	350	371
Sciences	2,776	2,911	3,238	3,699	4,337	4,599	4,873	5,163	5,275
Natural sciences	1,457	1,418	1,412	1,627	1,932	1,943	2,124	2,350	2,454
Physical science[1]	160	169	195	231	240	224	269	345	341
Mathematical science	202	173	205	270	267	268	262	237	255
Computer science	588	522	415	416	543	523	556	537	456
Biological science	487	533	561	668	838	863	972	1,146	1,298
Agricultural science	20	21	36	42	44	65	65	85	104
Social sciences	1,319	1,493	1,826	2,072	2,405	2,656	2,749	2,813	2,821
Social science	896	994	1,166	1,333	1,518	1,641	1,667	1,661	1,596
Psychology	423	499	660	739	887	1,015	1,082	1,152	1,225
Non-S&E[2]	7,001	7,175	8,065	8,709	9,375	10,105	10,231	10,818	10,636
	Percent from HBCUs								
Total, all Fields	28.5	28.0	28.3	28.2	29.0	28.7	28.4	28.5	27.4
Science and engineering	30.3	29.8	30.1	30.0	32.2	31.4	31.5	31.8	30.5
Engineering	24.8	29.4	30.9	28.6	33.2	30.3	29.8	33.8	35.1
Sciences	30.7	29.9	30.0	30.1	32.1	31.5	31.6	31.6	30.2
Natural sciences	44.5	42.9	42.8	44.1	47.1	44.0	45.1	46.3	45.6
Physical science[1]	48.2	47.2	53.9	53.1	51.5	49.0	49.9	55.8	53.0
Mathematical science	48.3	45.8	47.6	50.9	51.2	50.1	50.5	46.2	45.5
Computer science	47.0	44.5	40.4	41.7	46.6	42.3	44.2	44.9	39.4
Biological science	40.0	39.9	39.6	40.8	45.2	42.0	43.2	44.5	46.0
Agricultural science	36.4	34.4	58.1	45.2	47.3	49.6	45.8	48.3	51.7
Social sciences	22.9	23.2	24.4	24.0	25.6	26.1	25.7	25.0	23.4
Social science	24.5	24.4	24.9	24.6	25.8	26.5	26.2	25.1	22.8
Psychology	20.2	21.2	23.5	23.1	25.2	25.3	24.9	25.0	24.2
Non-S&E[2]	27.8	27.3	27.6	27.4	27.6	27.5	27.0	27.1	26.0

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 16. Number and percent of master's degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	13,455	14,473	15,857	17,420	18,897	20,936	22,954	24,588	26,948
Science and engineering	1,652	1,847	2,090	2,356	2,554	2,849	3,339	3,518	3,817
Engineering	355	387	398	466	564	589	665	674	674
Sciences	1,297	1,460	1,692	1,890	1,990	2,260	2,674	2,844	3,143
Natural sciences	495	527	644	699	716	821	881	932	1,010
Physical science[1]	78	87	73	98	105	127	147	116	144
Mathematical science	59	70	100	77	98	109	151	151	157
Computer science	198	232	283	316	308	365	347	379	377
Biological science	124	110	137	149	135	142	162	198	236
Agricultural science	36	28	51	59	70	78	74	88	96
Social sciences	802	933	1,048	1,191	1,274	1,439	1,793	1,912	2,133
Social science	407	462	594	660	730	803	930	965	1,010
Psychology	395	471	454	531	544	636	863	947	1,123
Non-S&E[2]	11,803	12,626	13,767	15,064	16,343	18,087	19,615	21,070	23,131
	Black recipients from HBCUs								
Total, all Fields	2,368	2,358	2,518	2,631	2,779	3,205	3,478	3,818	4,218
Science and engineering	314	339	391	426	453	484	582	644	711
Engineering	38	42	37	41	41	43	54	62	64
Sciences	276	297	354	385	412	441	528	582	647
Natural sciences	143	153	180	188	204	204	260	276	311
Physical science[1]	23	24	24	21	36	21	41	38	51
Mathematical science	13	17	21	17	23	21	44	48	45
Computer science	42	63	59	76	75	87	94	92	88
Biological science	47	37	46	47	38	34	48	60	76
Agricultural science	18	12	30	27	32	41	33	38	51
Social sciences	133	144	174	197	208	237	268	306	336
Social science	78	69	114	125	107	126	130	141	156
Psychology	55	75	60	72	101	111	138	165	180
Non-S&E[2]	2,054	2,019	2,127	2,205	2,326	2,721	2,896	3,174	3,507
	Percent from HBCUs								
Total, all Fields	17.6	16.3	15.9	15.1	14.7	15.3	15.2	15.5	15.7
Science and engineering	19.0	18.4	18.7	18.1	17.7	17.0	17.4	18.3	18.6
Engineering	10.7	10.9	9.3	8.8	7.3	7.3	8.1	9.2	9.5
Sciences	21.3	20.3	20.9	20.4	20.7	19.5	19.7	20.5	20.6
Natural sciences	28.9	29.0	28.0	26.9	28.5	24.8	29.5	29.6	30.8
Physical science[1]	29.5	27.6	32.9	21.4	34.3	16.5	27.9	32.8	35.4
Mathematical science	22.0	24.3	21.0	22.1	23.5	19.3	29.1	31.8	28.7
Computer science	21.2	27.2	20.8	24.1	24.4	23.8	27.1	24.3	23.3
Biological science	37.9	33.6	33.6	31.5	28.1	23.9	29.6	30.3	32.2
Agricultural science	50.0	42.9	58.8	45.8	45.7	52.6	44.6	43.2	53.1
Social sciences	16.6	15.4	16.6	16.5	16.3	16.5	14.9	16.0	15.8
Social science	19.2	14.9	19.2	18.9	14.7	15.7	14.0	14.6	15.4
Psychology	13.9	15.9	13.2	13.6	18.6	17.5	16.0	17.4	16.0
Non-S&E[2]	17.4	16.0	15.4	14.6	14.2	15.0	14.8	15.1	15.2

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 17. Number and percent of master's degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	4,964	5,169	5,619	5,794	6,472	7,007	7,636	7,998	8,444
Science and engineering	878	950	1,028	1,166	1,253	1,376	1,534	1,565	1,617
Engineering	262	287	299	332	407	422	464	464	449
Sciences	616	663	729	834	846	954	1,070	1,101	1,168
Natural sciences	290	307	338	382	386	435	434	467	484
Physical science[1]	56	61	43	66	58	74	86	59	74
Mathematical science	32	37	53	44	48	62	64	78	77
Computer science	119	140	150	175	193	205	199	205	208
Biological science	59	51	58	61	47	48	50	76	69
Agricultural science	24	18	34	36	40	46	35	49	56
Social sciences	326	356	391	452	460	519	636	634	684
Social science	206	223	262	315	345	358	418	391	426
Psychology	120	133	129	137	115	161	218	243	258
Non-S&E[2]	4,086	4,219	4,591	4,628	5,219	5,631	6,102	6,433	6,827
	Black recipients from HBCUs								
Total, all Fields	730	746	766	782	822	942	973	1,092	1,164
Science and engineering	154	164	172	195	191	208	230	282	266
Engineering	26	32	29	27	23	28	33	44	37
Sciences	128	132	143	168	168	180	197	238	229
Natural sciences	76	84	90	100	106	98	105	135	133
Physical science[1]	14	14	14	16	19	10	24	22	21
Mathematical science	8	9	7	7	9	12	20	24	19
Computer science	24	35	33	46	44	40	36	45	42
Biological science	19	17	15	15	11	7	12	22	20
Agricultural science	11	9	21	16	23	29	13	22	31
Social sciences	52	48	53	68	62	82	92	103	96
Social science	39	28	39	47	40	49	62	64	58
Psychology	13	20	14	21	22	33	30	39	38
Non-S&E[2]	576	582	594	587	631	734	743	810	898
	Percent from HBCUs								
Total, all Fields	14.7	14.4	13.6	13.5	12.7	13.4	12.7	13.7	13.8
Science and engineering	17.5	17.3	16.7	16.7	15.2	15.1	15.0	18.0	16.5
Engineering	9.9	11.1	9.7	8.1	5.7	6.6	7.1	9.5	8.2
Sciences	20.8	19.9	19.6	20.1	19.9	18.9	18.4	21.6	19.6
Natural sciences	26.2	27.4	26.6	26.2	27.5	22.5	24.2	28.9	27.5
Physical science[1]	25.0	23.0	32.6	24.2	32.8	13.5	27.9	37.3	28.4
Mathematical science	25.0	24.3	13.2	15.9	18.8	19.4	31.3	30.8	24.7
Computer science	20.2	25.0	22.0	26.3	22.8	19.5	18.1	22.0	20.2
Biological science	32.2	33.3	25.9	24.6	23.4	14.6	24.0	28.9	29.0
Agricultural science	45.8	50.0	61.8	44.4	57.5	63.0	37.1	44.9	55.4
Social sciences	16.0	13.5	13.6	15.0	13.5	15.8	14.5	16.2	14.0
Social science	18.9	12.6	14.9	14.9	11.6	13.7	14.8	16.4	13.6
Psychology	10.8	15.0	10.9	15.3	19.1	20.5	13.8	16.0	14.7
Non-S&E[2]	14.1	13.8	12.9	12.7	12.1	13.0	12.2	12.6	13.2

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

Table 18. Number and percent of master's degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	8,491	9,304	10,238	11,626	12,425	13,929	15,318	16,590	18,504
Science and engineering	774	897	1,062	1,190	1,301	1,473	1,805	1,953	2,200
Engineering	93	100	99	134	157	167	201	210	225
Sciences	681	797	963	1,056	1,144	1,306	1,604	1,743	1,975
Natural sciences	205	220	306	317	330	386	447	465	526
Physical science[1]	22	26	30	32	47	53	61	57	70
Mathematical science	27	33	47	33	50	47	87	73	80
Computer science	79	92	133	141	115	160	148	174	169
Biological science	65	59	79	88	88	94	112	122	167
Agricultural science	12	10	17	23	30	32	39	39	40
Social sciences	476	577	657	739	814	920	1,157	1,278	1,449
Social science	201	239	332	345	385	445	512	574	584
Psychology	275	338	325	394	429	475	645	704	865
Non-S&E[2]	7,717	8,407	9,176	10,436	11,124	12,456	13,513	14,637	16,304
	Black recipients from HBCUs								
Total, all Fields	1,638	1,612	1,752	1,849	1,957	2,263	2,505	2,726	3,054
Science and engineering	160	175	219	231	262	276	352	362	445
Engineering	12	10	8	14	18	15	21	18	27
Sciences	148	165	211	217	244	261	331	344	418
Natural sciences	67	69	90	88	98	106	155	141	178
Physical science[1]	9	10	10	5	17	11	17	16	30
Mathematical science	5	8	14	10	14	9	24	24	26
Computer science	18	28	26	30	31	47	58	47	46
Biological science	28	20	31	32	27	27	36	38	56
Agricultural science	7	3	9	11	9	12	20	16	20
Social sciences	81	96	121	129	146	155	176	203	240
Social science	39	41	75	78	67	77	68	77	98
Psychology	42	55	46	51	79	78	108	126	142
Non-S&E[2]	1,478	1,437	1,533	1,618	1,695	1,987	2,153	2,364	2,609
	Percent from HBCUs								
Total, all Fields	19.3	17.3	17.1	15.9	15.8	16.2	16.4	16.4	16.5
Science and engineering	20.7	19.5	20.6	19.4	20.1	18.7	19.5	18.5	20.2
Engineering	12.9	10.0	8.1	10.4	11.5	9.0	10.4	8.6	12.0
Sciences	21.7	20.7	21.9	20.5	21.3	20.0	20.6	19.7	21.2
Natural sciences	32.7	31.4	29.4	27.8	29.7	27.5	34.7	30.3	33.8
Physical science[1]	40.9	38.5	33.3	15.6	36.2	20.8	27.9	28.1	42.9
Mathematical science	18.5	24.2	29.8	30.3	28.0	19.1	27.6	32.9	32.5
Computer science	22.8	30.4	19.5	21.3	27.0	29.4	39.2	27.0	27.2
Biological science	43.1	33.9	39.2	36.4	30.7	28.7	32.1	31.1	33.5
Agricultural science	58.3	30.0	52.9	47.8	30.0	37.5	51.3	41.0	50.0
Social sciences	17.0	16.6	18.4	17.5	17.9	16.8	15.2	15.9	16.6
Social science	19.4	17.2	22.6	22.6	17.4	17.3	13.3	13.4	16.8
Psychology	15.3	16.3	14.2	12.9	18.4	16.4	16.7	17.9	16.4
Non-S&E[2]	19.2	17.1	16.7	15.5	15.2	16.0	15.9	16.2	16.0

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

Table 19. Number and percent of doctoral degrees earned by blacks which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	963	1,050	1,166	1,116	1,280	1,279	1,477	1,457	1,475
Science and engineering	367	374	464	408	469	500	560	576	616
Engineering	33	40	55	49	50	54	71	74	97
Sciences	334	334	409	359	419	446	489	502	519
Natural sciences	115	104	135	116	150	174	187	207	207
Physical science[1]	35	33	35	31	45	52	46	64	60
Mathematical science	8	4	11	4	8	11	5	8	7
Computer science	1	1	8	5	6	10	11	12	4
Biological science	57	51	64	62	75	79	108	98	111
Agricultural science	14	15	17	14	16	22	17	25	25
Social sciences	219	230	274	243	269	272	302	295	312
Social science	122	115	144	137	150	148	151	141	157
Psychology	97	115	130	106	119	124	151	154	155
Non-S&E[2]	596	676	702	708	811	779	917	881	859
	Black recipients from HBCUs								
Total, all Fields	87	141	112	104	135	134	138	142	115
Science and engineering	35	36	53	43	60	52	59	66	61
Engineering	1	0	3	2	0	4	1	4	1
Sciences	34	36	50	41	60	48	58	62	60
Natural sciences	16	15	21	12	26	17	29	25	32
Physical science[1]	3	4	6	0	6	3	10	4	8
Mathematical science	3	0	0	0	0	2	0	0	2
Computer science	0	0	0	0	0	0	0	1	0
Biological science	10	11	15	12	19	12	18	18	19
Agricultural science	0	0	0	0	1	0	1	2	3
Social sciences	18	21	29	29	34	31	29	37	28
Social science	12	13	10	19	22	11	11	25	15
Psychology	6	8	19	10	12	20	18	12	13
Non-S&E[2]	52	105	59	61	75	82	79	76	54
	Percent from HBCUs								
Total, all Fields	9.0	13.4	9.6	9.3	10.5	10.5	9.3	9.7	7.8
Science and engineering	9.5	9.6	11.4	10.5	12.8	10.4	10.5	11.5	9.9
Engineering	3.0	.0	5.5	4.1	.0	7.4	1.4	5.4	1.0
Sciences	10.2	10.8	12.2	11.4	14.3	10.8	11.9	12.4	11.6
Natural sciences	13.9	14.4	15.6	10.3	17.3	9.8	15.5	12.1	15.5
Physical science[1]	8.6	12.1	17.1	.0	13.3	5.8	21.7	6.3	13.3
Mathematical science	37.5	.0	.0	.0	.0	18.2	.0	.0	28.6
Computer science	.0	.0	.0	.0	.0	.0	.0	8.3	.0
Biological science	17.5	21.6	23.4	19.4	25.3	15.2	16.7	18.4	17.1
Agricultural science	.0	.0	.0	.0	6.3	.0	5.9	8.0	12.0
Social sciences	8.2	9.1	10.6	11.9	12.6	11.4	9.6	12.5	9.0
Social science	9.8	11.3	6.9	13.9	14.7	7.4	7.3	17.7	9.6
Psychology	6.2	7.0	14.6	9.4	10.1	16.1	11.9	7.8	8.4
Non-S&E[2]	8.7	15.5	8.4	8.6	9.2	10.5	8.6	8.6	6.3

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates

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Table 20. Number and percent of doctoral degrees earned by black men which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	453	479	552	519	579	553	615	641	632
Science and engineering	214	225	270	238	261	284	290	323	327
Engineering	30	34	47	43	39	41	56	55	74
Sciences	184	191	223	195	222	243	234	268	253
Natural sciences	78	71	88	80	99	104	115	147	126
Physical science[1]	27	24	29	24	35	38	28	49	48
Mathematical science	5	3	7	4	7	8	4	6	5
Computer science	0	1	4	4	2	8	7	9	3
Biological science	33	29	32	38	43	34	65	58	51
Agricultural science	13	14	16	10	12	16	11	25	19
Social sciences	106	120	135	115	123	139	119	121	127
Social science	70	77	91	87	79	93	80	82	86
Psychology	36	43	44	28	44	46	39	39	41
Non-S&E[2]	239	254	282	281	318	269	325	318	305
	Black recipients from HBCUs								
Total, all Fields	41	61	58	48	56	55	57	68	52
Science and engineering	21	22	32	23	30	28	32	40	33
Engineering	1	0	3	2	0	3	1	3	1
Sciences	20	22	29	21	30	25	31	37	32
Natural sciences	10	7	15	5	15	7	17	17	16
Physical science[1]	2	2	5	0	5	2	6	4	8
Mathematical science	2	0	0	0	0	1	0	0	0
Computer science	0	0	0	0	0	0	0	0	0
Biological science	6	5	10	5	9	4	10	11	7
Agricultural science	0	0	0	0	1	0	1	2	1
Social sciences	10	15	14	16	15	18	14	20	16
Social science	9	11	8	14	12	10	8	16	11
Psychology	1	4	6	2	3	8	6	4	5
Non-S&E[2]	20	39	26	25	26	27	25	28	19
	Percent from HBCUs								
Total, all Fields	9.1	12.7	10.5	9.2	9.7	9.9	9.3	10.6	8.2
Science and engineering	9.8	9.8	11.9	9.7	11.5	9.9	11.0	12.4	10.1
Engineering	3.3	0	6.4	4.7	0	7.3	1.8	5.5	1.4
Sciences	10.9	11.5	13.0	10.8	13.5	10.3	13.2	13.8	12.6
Natural sciences	12.8	9.9	17.0	6.3	15.2	6.7	14.8	11.6	12.7
Physical science[1]	7.4	8.3	17.2	0	14.3	5.3	21.4	8.2	16.7
Mathematical science	40.0	0	0	0	0	12.5	0	0	0
Computer science	0	0	0	0	0	0	0	0	0
Biological science	18.2	17.2	31.3	13.2	20.9	11.8	15.4	19.0	13.7
Agricultural science	0	0	0	0	8.3	0	9.1	8.0	5.3
Social sciences	9.4	12.5	10.4	13.9	12.2	12.9	11.8	16.5	12.6
Social science	12.9	14.3	8.8	16.1	15.2	10.8	10.0	19.5	12.8
Psychology	2.8	9.3	13.6	7.1	6.8	17.4	15.4	10.3	12.2
Non-S&E[2]	8.4	15.4	9.2	8.9	8.2	10.0	7.7	8.8	6.2

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates.

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Table 21. Number and percent of doctoral degrees earned by black women which are conferred by historically black colleges and universities (HBCUs), by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all black recipients								
Total, all Fields	510	571	614	597	701	726	862	816	843
Science and engineering	153	149	194	170	208	216	270	253	289
Engineering	3	6	8	6	11	13	15	19	23
Sciences	150	143	186	164	197	203	255	234	266
Natural sciences	37	33	47	36	51	70	72	60	81
Physical science[1]	8	9	6	7	10	14	18	15	12
Mathematical science	3	1	4	0	1	3	1	2	2
Computer science	1	0	4	1	4	2	4	3	1
Biological science	24	22	32	24	32	45	43	40	60
Agricultural science	1	1	1	4	4	6	6	0	6
Social sciences	113	110	139	128	146	133	183	174	185
Social science	52	38	53	50	71	55	71	59	71
Psychology	61	72	86	78	75	78	112	115	114
Non-S&E[2]	357	422	420	427	493	510	592	563	554
	Black recipients from HBCUs								
Total, all Fields	46	80	54	56	79	79	81	74	63
Science and engineering	14	14	21	20	30	24	27	26	28
Engineering	0	0	0	0	0	1	0	1	0
Sciences	14	14	21	20	30	23	27	25	28
Natural sciences	6	8	6	7	11	10	12	8	16
Physical science[1]	1	2	1	0	1	1	4	0	0
Mathematical science	1	0	0	0	0	1	0	0	2
Computer science	0	0	0	0	0	0	0	1	0
Biological science	4	6	5	7	10	8	8	7	12
Agricultural science	0	0	0	0	0	0	0	0	2
Social sciences	8	6	15	13	19	13	15	17	12
Social science	3	2	2	5	10	1	3	9	4
Psychology	5	4	13	8	9	12	12	8	8
Non-S&E[2]	32	66	33	36	49	55	54	48	35
	Percent from HBCUs								
Total, all Fields	9.0	14.0	8.8	9.4	11.3	10.9	9.4	9.1	7.5
Science and engineering	9.2	9.4	10.8	11.8	14.4	11.1	10.0	10.3	9.7
Engineering	.0	0	.0	.0	0	7.7	0	5.3	.0
Sciences	9.3	9.8	11.3	12.2	15.2	11.3	10.6	10.7	10.5
Natural sciences	16.2	24.2	12.8	19.4	21.6	14.3	16.7	13.3	19.8
Physical science[1]	12.5	22.2	16.7	.0	10.0	7.1	22.2	0	.0
Mathematical science	33.3	.0	.0	0	0	33.3	0	.0	100.0
Computer science	.0	0	.0	.0	0	0	.0	33.3	.0
Biological science	16.7	27.3	15.6	29.2	31.3	17.8	18.6	17.5	20.0
Agricultural science	.0	.0	.0	.0	0	0	.0	0	33.3
Social sciences	7.1	5.5	10.8	10.2	13.0	9.8	8.2	9.8	6.5
Social science	5.8	5.3	3.8	10.0	14.1	1.8	4.2	15.3	5.6
Psychology	8.2	5.6	15.1	10.3	12.0	15.4	10.7	7.0	7.0
Non-S&E[2]	9.0	15.6	7.9	8.4	9.9	10.8	9.1	8.5	6.3

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates

Table 22. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	41,361	43,864	49,027	53,007	57,845	62,683	66,691	71,015	74,938
Science and engineering	13,327	13,918	15,351	17,391	18,442	20,529	22,190	23,791	25,266
Engineering	2,561	2,511	2,566	2,733	2,961	3,143	3,651	3,731	4,125
Sciences	10,766	11,407	12,785	14,658	15,481	17,386	18,539	20,060	21,141
Natural sciences	4,417	4,357	4,705	4,892	5,034	5,648	6,119	6,764	7,055
Physical science[1]	563	522	533	546	599	733	800	872	853
Mathematical science	373	413	480	482	470	543	536	585	581
Computer science	1,195	1,085	1,215	1,173	1,096	1,135	1,307	1,280	1,267
Biological science	2,090	2,119	2,264	2,477	2,652	2,901	3,090	3,521	3,793
Agricultural science	196	218	213	214	217	336	386	506	561
Social sciences	6,349	7,050	8,080	9,766	10,447	11,738	12,420	13,296	14,086
Social science	4,197	4,645	5,334	6,519	6,860	7,748	7,877	8,260	8,804
Psychology	2,152	2,405	2,746	3,247	3,587	3,990	4,543	5,036	5,282
Non-S&E[2]	28,034	29,946	33,676	35,616	39,403	42,154	44,501	47,224	49,672
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	12,202	12,175	12,510	12,755	13,359	13,454	13,792	14,106	14,093
Science and engineering	3,056	2,983	2,952	3,007	3,001	3,205	3,501	3,628	3,849
Engineering	651	626	554	686	697	742	988	915	1,125
Sciences	2,405	2,357	2,398	2,321	2,304	2,463	2,513	2,713	2,724
Natural sciences	1,479	1,447	1,446	1,339	1,300	1,374	1,459	1,658	1,641
Physical science[1]	184	184	154	172	172	227	311	324	303
Mathematical science	69	69	108	34	41	27	27	39	24
Computer science	326	261	327	296	254	258	257	263	202
Biological science	858	862	797	837	833	808	812	964	1,021
Agricultural science	42	71	60	0	0	54	52	68	91
Social sciences	926	910	952	982	1,004	1,089	1,054	1,055	1,083
Social science	501	495	523	496	508	590	554	549	603
Psychology	425	415	429	486	496	499	500	506	480
Non-S&E[2]	9,146	9,192	9,558	9,748	10,358	10,249	10,291	10,478	10,244
	Percent from institutions in Puerto Rico								
Total, all Fields	29.5	27.8	25.5	24.1	23.1	21.5	20.7	19.9	18.8
Science and engineering	22.9	21.4	19.2	17.3	16.3	15.6	15.8	15.2	15.2
Engineering	25.4	24.9	21.6	25.1	23.5	23.6	27.1	24.5	27.3
Sciences	22.3	20.7	18.8	15.8	14.9	14.2	13.6	13.5	12.9
Natural sciences	33.5	33.2	30.7	27.4	25.8	24.3	23.8	24.5	23.3
Physical science[1]	32.7	35.2	28.9	31.5	28.7	31.0	38.9	37.2	35.5
Mathematical science	18.5	16.7	22.5	7.1	8.7	5.0	5.0	6.7	4.1
Computer science	27.3	24.1	26.9	25.2	23.2	22.7	19.7	20.5	15.9
Biological science	41.1	40.7	35.2	33.8	31.4	27.9	26.3	27.4	26.9
Agricultural science	21.4	32.6	28.2	0	0	16.1	13.5	13.4	16.2
Social sciences	14.6	12.9	11.8	10.1	9.6	9.3	8.5	7.9	7.7
Social science	11.9	10.7	9.8	7.6	7.4	7.6	7.0	6.6	6.8
Psychology	19.7	17.3	15.6	15.0	13.8	12.5	11.0	10.0	9.1
Non-S&E[2]	32.6	30.7	28.4	27.4	26.3	24.3	23.1	22.2	20.6

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System Completions Survey.

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Table 23. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	18,002	18,683	20,781	22,026	23,825	25,860	27,875	29,335	30,550
Science and engineering	7,318	7,434	7,888	8,730	9,160	10,190	11,031	11,592	12,044
Engineering	2,100	2,035	2,039	2,187	2,355	2,495	2,895	2,897	3,196
Sciences	5,218	5,399	5,849	6,543	6,805	7,695	8,136	8,695	8,848
Natural sciences	2,432	2,328	2,458	2,497	2,608	2,925	3,196	3,509	3,544
Physical science[1]	362	311	318	326	361	415	437	488	468
Mathematical science	224	249	259	279	273	300	315	354	340
Computer science	750	669	738	724	700	719	876	824	841
Biological science	965	955	1,019	1,043	1,144	1,298	1,340	1,560	1,598
Agricultural science	131	144	124	125	130	193	228	283	297
Social sciences	2,786	3,071	3,391	4,046	4,197	4,770	4,940	5,186	5,304
Social science	2,153	2,384	2,634	3,220	3,269	3,774	3,774	3,860	4,019
Psychology	633	687	757	826	928	996	1,166	1,326	1,285
Non-S&E[2]	10,684	11,249	12,893	13,296	14,665	15,670	16,844	17,743	18,506
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	4,373	4,266	4,569	4,252	4,369	4,513	4,864	4,966	4,948
Science and engineering	1,559	1,462	1,365	1,362	1,339	1,426	1,657	1,711	1,789
Engineering	525	481	398	498	511	534	743	661	791
Sciences	1,034	981	967	864	828	892	914	1,050	998
Natural sciences	671	626	612	520	496	540	609	692	656
Physical science[1]	91	90	70	78	70	86	131	143	134
Mathematical science	39	47	50	20	24	15	16	28	16
Computer science	197	143	170	159	147	149	164	162	123
Biological science	322	302	293	263	255	258	265	322	331
Agricultural science	22	44	29	0	0	32	33	37	52
Social sciences	363	355	355	344	332	352	305	358	342
Social science	257	252	245	243	211	248	220	218	249
Psychology	106	103	110	101	121	104	85	140	93
Non-S&E[2]	2,814	2,804	3,204	2,890	3,030	3,087	3,207	3,255	3,159
	Percent from institutions in Puerto Rico								
Total, all Fields	24.3	22.8	22.0	19.3	18.3	17.5	17.4	16.9	16.2
Science and engineering	21.3	19.7	17.3	15.6	14.6	14.0	15.0	14.8	14.9
Engineering	25.0	23.6	19.5	22.8	21.7	21.4	25.7	22.8	24.7
Sciences	19.8	18.2	16.5	13.2	12.2	11.6	11.2	12.1	11.3
Natural sciences	27.6	26.9	24.9	20.8	19.0	18.5	19.1	19.7	18.5
Physical science[1]	25.1	28.9	22.0	23.9	19.4	20.7	30.0	29.3	28.6
Mathematical science	17.4	18.9	19.3	7.2	8.8	5.0	5.1	7.9	4.7
Computer science	26.3	21.4	23.0	22.0	21.0	20.7	18.7	19.7	14.6
Biological science	33.4	31.6	28.8	25.2	22.3	19.9	19.8	20.6	20.7
Agricultural science	16.8	30.6	23.4	.0	0	16.6	14.5	13.1	17.5
Social sciences	13.0	11.6	10.5	8.5	7.9	7.4	6.2	6.9	6.4
Social science	11.9	10.6	9.3	7.5	6.5	6.6	5.8	5.6	6.2
Psychology	16.7	15.0	14.5	12.2	13.0	10.4	7.3	10.6	7.2
Non-S&E[2]	26.3	24.9	24.9	21.7	20.7	19.7	19.0	18.3	17.1

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 24. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	23,359	25,181	28,246	30,981	34,020	36,823	38,816	41,680	44,388
Science and engineering	6,009	6,484	7,463	8,661	9,282	10,339	11,159	12,199	13,222
Engineering	461	476	527	546	606	648	756	834	929
Sciences	5,548	6,008	6,936	8,115	8,676	9,691	10,403	11,365	12,293
Natural sciences	1,985	2,029	2,247	2,395	2,426	2,723	2,923	3,255	3,511
Physical science[1]	201	211	215	220	238	318	363	384	385
Mathematical science	149	164	221	203	197	243	221	231	241
Computer science	445	416	477	449	396	416	431	456	426
Biological science	1,125	1,164	1,245	1,434	1,508	1,603	1,750	1,961	2,195
Agricultural science	65	74	89	89	87	143	158	223	264
Social sciences	3,563	3,979	4,689	5,720	6,250	6,968	7,480	8,110	8,782
Social science	2,044	2,261	2,700	3,299	3,591	3,974	4,103	4,400	4,785
Psychology	1,519	1,718	1,989	2,421	2,659	2,994	3,377	3,710	3,997
Non-S&E[2]	17,350	18,697	20,783	22,320	24,738	26,484	27,657	29,481	31,166
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	7,829	7,909	7,941	8,503	8,990	8,941	8,928	9,140	9,145
Science and engineering	1,497	1,521	1,587	1,645	1,662	1,779	1,844	1,917	2,060
Engineering	126	145	156	188	186	208	245	254	334
Sciences	1,371	1,376	1,431	1,457	1,476	1,571	1,599	1,663	1,726
Natural sciences	808	821	834	819	804	834	850	966	985
Physical science[1]	93	94	84	94	102	141	180	181	169
Mathematical science	30	22	58	14	17	12	11	11	8
Computer science	129	118	157	137	107	109	93	101	79
Biological science	536	560	504	574	578	550	547	642	690
Agricultural science	20	27	31	0	0	22	19	31	39
Social sciences	563	555	597	638	672	737	749	697	741
Social science	244	243	278	253	297	342	334	331	354
Psychology	319	312	319	385	375	395	415	366	387
Non-S&E[2]	6,332	6,388	6,354	6,858	7,328	7,162	7,084	7,223	7,085
	Percent from institutions in Puerto Rico								
Total, all Fields	33.5	31.4	28.1	27.4	26.4	24.3	23.0	21.9	20.6
Science and engineering	24.9	23.5	21.3	19.0	17.9	17.2	16.5	15.7	15.6
Engineering	27.3	30.5	29.6	34.4	30.7	32.1	32.4	30.5	36.0
Sciences	24.7	22.9	20.6	18.0	17.0	16.2	15.4	14.6	14.0
Natural sciences	40.7	40.5	37.1	34.2	33.1	30.6	29.1	29.7	28.1
Physical science[1]	46.3	44.5	39.1	42.7	42.9	44.3	49.6	47.1	43.9
Mathematical science	20.1	13.4	26.2	6.9	8.6	4.9	5.0	4.8	3.3
Computer science	29.0	28.4	32.9	30.5	27.0	26.2	21.6	22.1	18.5
Biological science	47.6	48.1	40.5	40.0	38.3	34.3	31.3	32.7	31.4
Agricultural science	30.8	36.5	34.8	0	0	15.4	12.0	13.9	14.8
Social sciences	15.8	13.9	12.7	11.2	10.8	10.6	10.0	8.6	8.4
Social science	11.9	10.7	10.3	7.7	8.3	8.6	8.1	7.5	7.4
Psychology	21.0	18.2	16.0	15.9	14.1	13.2	12.3	9.9	9.7
Non-S&E[2]	36.5	34.2	30.6	30.7	29.6	27.0	25.6	24.5	22.7

1 In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

2 Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 25. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	8,133	8,495	9,684	10,256	11,371	13,177	13,905	15,394	16,360
Science and engineering	1,585	1,587	1,736	1,806	2,092	2,514	2,585	2,730	2,882
Engineering	468	446	468	488	581	719	711	748	765
Sciences	1,117	1,141	1,268	1,318	1,511	1,795	1,874	1,982	2,117
Natural sciences	444	431	494	503	574	680	665	677	720
Physical science[1]	92	98	96	93	114	114	129	127	139
Mathematical science	34	51	85	66	78	75	75	91	71
Computer science	144	118	128	149	162	169	198	173	197
Biological science	126	120	136	146	151	138	167	191	208
Agricultural science	48	44	49	49	69	184	96	95	105
Social sciences	673	710	774	815	937	1,115	1,209	1,305	1,397
Social science	313	341	383	396	474	557	553	596	626
Psychology	360	369	391	419	463	558	656	709	771
Non-S&E[2]	6,548	6,908	7,948	8,450	9,279	10,663	11,320	12,664	13,478
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	1,247	1,062	1,223	1,224	1,241	1,682	1,523	1,491	1,544
Science and engineering	214	207	214	140	160	311	289	288	339
Engineering	22	32	23	0	1	86	64	75	83
Sciences	192	175	191	140	159	225	225	213	256
Natural sciences	62	65	83	27	47	68	72	91	105
Physical science[1]	19	21	16	9	12	18	17	31	33
Mathematical science	6	7	17	7	14	8	9	6	7
Computer science	7	0	0	0	4	5	6	5	9
Biological science	17	30	39	11	17	18	20	37	28
Agricultural science	13	7	11	0	0	19	20	12	28
Social sciences	130	110	108	113	112	157	153	122	151
Social science	25	25	31	32	30	36	17	28	27
Psychology	105	85	77	81	82	121	136	94	124
Non-S&E[2]	1,033	855	1,009	1,084	1,081	1,371	1,234	1,203	1,205
	Percent from institutions in Puerto Rico								
Total, all Fields	15.3	12.5	12.6	11.9	10.9	12.8	11.0	9.7	9.4
Science and engineering	13.5	13.0	12.3	7.8	7.6	12.4	11.2	10.5	11.8
Engineering	4.7	7.2	4.9	0	.2	12.0	9.0	10.0	10.8
Sciences	17.2	15.3	15.1	10.6	10.5	12.5	12.0	10.7	12.1
Natural sciences	14.0	15.1	16.8	5.4	8.2	10.0	10.8	13.4	14.6
Physical science[1]	20.7	21.4	16.7	9.7	10.5	15.8	13.2	24.4	23.7
Mathematical science	17.6	13.7	20.0	10.6	17.9	10.7	12.0	6.6	9.9
Computer science	4.9	0	.0	.0	2.5	3.0	3.0	2.9	4.6
Biological science	13.5	25.0	28.7	7.5	11.3	13.0	12.0	19.4	13.5
Agricultural science	27.1	15.9	22.4	.0	0	10.3	20.8	12.6	26.7
Social sciences	19.3	15.5	14.0	13.9	12.0	14.1	12.7	9.3	10.8
Social science	8.0	7.3	8.1	8.1	6.3	6.5	3.1	4.7	4.3
Psychology	29.2	23.0	19.7	19.3	17.7	21.7	20.7	13.3	16.1
Non-S&E[2]	15.8	12.4	12.7	12.8	11.6	12.9	10.9	9.5	8.9

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics' Integrated Postsecondary Education Data System Completions Survey.

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Table 26. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	3,597	3,713	4,124	4,381	4,875	5,483	5,725	6,072	6,466
Science and engineering	970	959	992	1,066	1,255	1,427	1,458	1,478	1,576
Engineering	394	373	378	408	480	582	578	580	589
Sciences	576	586	614	658	775	845	880	898	987
Natural sciences	282	275	294	309	341	414	423	402	435
Physical science[1]	65	63	73	64	76	80	88	80	86
Mathematical science	21	33	52	47	50	44	53	57	50
Computer science	100	93	84	98	104	120	151	125	141
Biological science	62	61	54	69	76	65	75	85	107
Agricultural science	34	25	31	31	35	105	56	55	51
Social sciences	294	311	320	349	434	431	457	496	552
Social science	176	178	196	218	282	290	283	320	344
Psychology	118	133	124	131	152	141	174	176	208
Non-S&E[2]	2,627	2,754	3,132	3,315	3,620	4,056	4,267	4,594	4,890
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	416	365	386	398	402	586	500	497	531
Science and engineering	103	103	80	48	56	154	130	144	148
Engineering	21	26	15	0	1	68	51	61	56
Sciences	82	77	65	48	55	86	79	83	92
Natural sciences	35	33	39	12	23	43	47	49	48
Physical science[1]	14	11	9	4	6	15	14	16	19
Mathematical science	2	3	9	4	11	5	6	3	4
Computer science	4	0	0	0	1	3	3	3	4
Biological science	5	14	13	4	5	8	10	19	11
Agricultural science	10	5	8	0	0	12	14	8	10
Social sciences	47	44	26	36	32	43	32	34	44
Social science	16	10	8	14	16	25	9	14	16
Psychology	31	34	18	22	16	18	23	20	28
Non-S&E[2]	313	262	306	350	346	432	370	353	383
	Percent from institutions in Puerto Rico								
Total, all Fields	11.6	9.8	9.4	9.1	8.2	10.7	8.7	8.2	8.2
Science and engineering	10.6	10.7	8.1	4.5	4.5	10.8	8.9	9.7	9.4
Engineering	5.3	7.0	4.0	.0	.2	11.7	8.8	10.5	9.5
Sciences	14.2	13.1	10.6	7.3	7.1	10.2	9.0	9.2	9.3
Natural sciences	12.4	12.0	13.3	3.9	6.7	10.4	11.1	12.2	11.0
Physical science[1]	21.5	17.5	12.3	6.3	7.9	18.8	15.9	20.0	22.1
Mathematical science	9.5	9.1	17.3	8.5	22.0	11.4	11.3	5.3	8.0
Computer science	4.0	.0	.0	.0	1.0	2.5	2.0	2.4	2.8
Biological science	8.1	23.0	24.1	5.8	6.6	12.3	13.3	22.4	10.3
Agricultural science	29.4	20.0	25.8	.0	.0	11.4	25.0	14.5	19.6
Social sciences	16.0	14.1	8.1	10.3	7.4	10.0	7.0	6.9	8.0
Social science	9.1	5.6	4.1	6.4	5.7	8.6	3.2	4.4	4.7
Psychology	26.3	25.6	14.5	16.8	10.5	12.8	13.2	11.4	13.5
Non-S&E[2]	11.9	9.5	9.8	10.6	9.6	10.7	8.7	7.7	7.8

1 In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

2 Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

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Table 27. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	4,536	4,782	5,560	5,875	6,496	7,694	8,180	9,322	9,894
Science and engineering	615	628	744	740	837	1,087	1,127	1,252	1,306
Engineering	74	73	90	80	101	137	133	168	176
Sciences	541	555	654	660	736	950	994	1,084	1,130
Natural sciences	162	156	200	194	233	266	242	275	285
Physical science[1]	27	35	23	29	38	34	41	47	53
Mathematical science	13	18	33	19	28	31	22	34	21
Computer science	44	25	44	51	58	49	47	48	56
Biological science	64	59	82	77	75	73	92	106	101
Agricultural science	14	19	18	18	34	79	40	40	54
Social sciences	379	399	454	466	503	684	752	809	845
Social science	137	163	187	178	192	267	270	276	282
Psychology	242	236	267	288	311	417	482	533	563
Non-S&E[2]	3,921	4,154	4,816	5,135	5,659	6,607	7,053	8,070	8,588
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	831	697	837	826	839	1,096	1,023	994	1,013
Science and engineering	111	104	134	92	104	157	159	144	191
Engineering	1	6	8	0	0	18	13	14	27
Sciences	110	98	126	92	104	139	146	130	164
Natural sciences	27	32	44	15	24	25	25	42	57
Physical science[1]	5	10	7	5	6	3	3	15	14
Mathematical science	4	4	8	3	3	3	3	3	3
Computer science	3	0	0	0	3	2	3	2	5
Biological science	12	16	26	7	12	10	10	18	17
Agricultural science	3	2	3	0	0	7	6	4	18
Social sciences	83	66	82	77	80	114	121	88	107
Social science	9	15	23	18	14	11	8	14	11
Psychology	74	51	59	59	66	103	113	74	96
Non-S&E[2]	720	593	703	734	735	939	864	850	822
	Percent from institutions in Puerto Rico								
Total, all Fields	18.3	14.6	15.1	14.1	12.9	14.2	12.5	10.7	10.2
Science and engineering	18.0	16.6	18.0	12.4	12.4	14.4	14.1	11.5	14.6
Engineering	1.4	8.2	8.9	0	0	13.1	9.8	8.3	15.3
Sciences	20.3	17.7	19.3	13.9	14.1	14.6	14.7	12.0	14.5
Natural sciences	16.7	20.5	22.0	7.7	10.3	9.4	10.3	15.3	20.0
Physical science[1]	18.5	28.6	30.4	17.2	15.8	8.8	7.3	31.9	26.4
Mathematical science	30.8	22.2	24.2	15.8	10.7	9.7	13.6	8.8	14.3
Computer science	6.8	0	0	0	5.2	4.1	6.4	4.2	8.9
Biological science	18.8	27.1	31.7	9.1	16.0	13.7	10.9	17.0	16.8
Agricultural science	21.4	10.5	16.7	0	0	8.9	15.0	10.0	33.3
Social sciences	21.9	16.5	18.1	16.5	15.9	16.7	16.1	10.9	12.7
Social science	6.6	9.2	12.3	10.1	7.3	4.1	3.0	5.1	3.9
Psychology	30.6	21.6	22.1	20.5	21.2	24.7	23.4	13.9	17.1
Non-S&E[2]	18.4	14.3	14.6	14.3	13.0	14.2	12.3	10.5	9.6

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 28. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	694	837	867	909	973	1,030	1,061	1,105	1,183
Science and engineering	382	468	492	513	542	548	571	623	653
Engineering	47	54	60	71	66	66	77	98	97
Sciences	335	414	432	442	476	482	494	525	556
Natural sciences	172	212	212	228	249	274	255	255	290
Physical science[1]	68	85	81	88	92	98	86	85	83
Mathematical science	11	10	9	12	16	13	15	10	18
Computer science	4	5	12	8	7	7	6	16	17
Biological science	71	89	95	102	114	131	127	131	146
Agricultural science	18	23	15	18	20	25	21	13	26
Social sciences	163	202	220	214	227	208	239	270	266
Social science	70	93	98	81	96	75	94	97	97
Psychology	93	109	122	133	131	133	145	173	169
Non-S&E[2]	312	369	375	396	431	482	490	482	530
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	17	33	25	50	31	57	51	43	88
Science and engineering	12	18	12	26	14	30	36	29	49
Engineering	0	0	0	0	0	0	0	0	0
Sciences	12	18	12	26	14	30	36	29	49
Natural sciences	5	8	5	5	6	12	5	3	6
Physical science[1]	4	6	3	4	4	7	5	3	5
Mathematical science	0	0	0	0	0	0	0	0	0
Computer science	0	0	0	0	0	0	0	0	0
Biological science	1	2	2	1	2	5	0	0	1
Agricultural science	0	0	0	0	0	0	0	0	0
Social sciences	7	10	7	21	8	18	31	26	43
Social science	1	0	1	5	0	1	0	0	1
Psychology	6	10	6	16	8	17	31	26	42
Non-S&E[2]	5	15	13	24	17	27	15	14	39
	Percent from institutions in Puerto Rico								
Total, all Fields	2.4	3.9	2.9	5.5	3.2	5.5	4.8	3.9	7.4
Science and engineering	3.1	3.8	2.4	5.1	2.6	5.5	6.3	4.7	7.5
Engineering	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sciences	3.6	4.3	2.8	5.9	2.9	6.2	7.3	5.5	8.8
Natural sciences	2.9	3.8	2.4	2.2	2.4	4.4	2.0	1.2	2.1
Physical science[1]	5.9	7.1	3.7	4.5	4.3	7.1	5.8	3.5	6.0
Mathematical science	.0	.0	.0	.0	.0	.0	.0	.0	.0
Computer science	.0	.0	.0	.0	.0	.0	.0	.0	.0
Biological science	1.4	2.2	2.1	1.0	1.8	3.8	.0	.0	.7
Agricultural science	.0	.0	.0	.0	.0	.0	.0	.0	.0
Social sciences	4.3	5.0	3.2	9.8	3.5	8.7	13.0	9.6	16.2
Social science	1.4	.0	1.0	6.2	.0	1.3	.0	.0	1.0
Psychology	6.5	9.2	4.9	12.0	6.1	12.8	21.4	15.0	24.9
Non-S&E[2]	1.6	4.1	3.5	6.1	3.9	5.6	3.1	2.9	7.4

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates.

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Table 29. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	376	449	458	482	517	518	539	564	617
Science and engineering	227	290	306	308	320	318	339	351	388
Engineering	39	45	50	56	54	60	66	84	74
Sciences	188	245	256	252	266	258	273	267	314
Natural sciences	120	138	152	151	162	174	168	160	193
Physical science[1]	47	55	68	62	70	75	59	67	64
Mathematical science	7	6	5	9	14	10	11	10	12
Computer science	1	4	11	7	6	7	2	9	15
Biological science	50	56	56	59	57	69	80	65	83
Agricultural science	15	17	12	14	15	13	16	9	19
Social sciences	68	107	104	101	104	84	105	107	121
Social science	38	55	52	46	59	41	57	54	59
Psychology	30	52	52	55	45	43	48	53	62
Non-S&E[2]	149	159	152	174	197	200	200	213	229
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	5	9	7	14	10	18	16	15	29
Science and engineering	3	6	3	11	7	11	13	11	17
Engineering	0	0	0	0	0	0	0	0	0
Sciences	3	6	3	11	7	11	13	11	17
Natural sciences	2	2	2	4	4	6	4	2	3
Physical science[1]	2	1	2	3	2	5	4	2	3
Mathematical science	0	0	0	0	0	0	0	0	0
Computer science	0	0	0	0	0	0	0	0	0
Biological science	0	1	0	1	2	1	0	0	0
Agricultural science	0	0	0	0	0	0	0	0	0
Social sciences	1	4	1	7	3	5	9	9	14
Social science	0	0	0	0	0	0	0	0	0
Psychology	1	4	1	7	3	5	9	9	14
Non-S&E[2]	2	3	4	3	3	7	3	4	12
	Percent from institutions in Puerto Rico								
Total, all Fields	1.3	2.0	1.5	2.9	1.9	3.5	3.0	2.7	4.7
Science and engineering	1.3	2.1	1.0	3.6	2.2	3.5	3.8	3.1	4.4
Engineering	0	0	0	0	0	0	0	0	0
Sciences	1.6	2.4	1.2	4.4	2.6	4.3	4.8	4.1	5.4
Natural sciences	1.7	1.4	1.3	2.6	2.5	3.4	2.4	1.2	1.6
Physical science[1]	4.3	1.8	2.9	4.8	2.9	6.7	6.8	3.0	4.7
Mathematical science	0	0	0	0	0	0	0	0	0
Computer science	0	0	0	0	0	0	0	0	0
Biological science	0	1.8	0	1.7	3.5	1.4	0	0	0
Agricultural science	0	0	0	0	0	0	0	0	0
Social sciences	1.5	3.7	1.0	6.9	2.9	6.0	8.6	8.4	11.6
Social science	0	0	0	0	0	0	0	0	0
Psychology	3.3	7.7	1.9	12.7	6.7	11.6	18.8	17.0	22.6
Non-S&E[2]	1.3	1.9	2.6	1.7	1.5	3.5	1.5	1.9	5.2

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates

Table 30. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1989-97

Field	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total, all Hispanic recipients								
Total, all Fields	318	388	409	427	456	512	522	541	566
Science and engineering	155	178	186	205	222	230	232	272	265
Engineering	8	9	10	15	12	6	11	14	23
Sciences	147	169	176	190	210	224	221	258	242
Natural sciences	52	74	60	77	87	100	87	95	97
Physical science[1]	21	30	13	26	22	23	27	18	19
Mathematical science	4	4	4	3	2	3	4	0	6
Computer science	3	1	1	1	1	0	4	7	2
Biological science	21	33	39	43	57	62	47	66	63
Agricultural science	3	6	3	4	5	12	5	4	7
Social sciences	95	95	116	113	123	124	134	163	145
Social science	32	38	46	35	37	34	37	43	38
Psychology	63	57	70	78	86	90	97	120	107
Non-S&E[2]	163	210	223	222	234	282	290	269	301
	Hispanic recipients from institutions in Puerto Rico								
Total, all Fields	12	24	18	36	21	39	35	28	59
Science and engineering	9	12	9	15	7	19	23	18	32
Engineering	0	0	0	0	0	0	0	0	0
Sciences	9	12	9	15	7	19	23	18	32
Natural sciences	3	6	3	1	2	6	1	1	3
Physical science[1]	2	5	1	1	2	2	1	1	2
Mathematical science	0	0	0	0	0	0	0	0	0
Computer science	0	0	0	0	0	0	0	0	0
Biological science	1	1	2	0	0	4	0	0	1
Agricultural science	0	0	0	0	0	0	0	0	0
Social sciences	6	6	6	14	5	13	22	17	29
Social science	1	0	1	5	0	1	0	0	1
Psychology	5	6	5	9	5	12	22	17	28
Non-S&E[2]	3	12	9	21	14	20	12	10	27
	Percent from institutions in Puerto Rico								
Total, all Fields	3.8	6.2	4.4	8.4	4.6	7.6	6.7	5.2	10.4
Science and engineering	5.8	6.7	4.8	7.3	3.2	8.3	9.9	6.6	12.1
Engineering	0	0	0	0	0	0	0	0	0
Sciences	6.1	7.1	5.1	7.9	3.3	8.5	10.4	7.0	13.2
Natural sciences	5.8	8.1	5.0	1.3	2.3	6.0	1.1	1.1	3.1
Physical science[1]	9.5	16.7	7.7	3.8	9.1	8.7	3.7	5.6	10.5
Mathematical science	0	0	0	0	0	0	0	0	0
Computer science	0	0	0	0	0	0	0	0	0
Biological science	4.8	3.0	5.1	0	0	6.5	0	0	1.6
Agricultural science	0	0	0	0	0	0	0	0	0
Social sciences	6.3	6.3	5.2	12.4	4.1	10.5	16.4	10.4	20.0
Social science	3.1	0	2.2	14.3	0	2.9	0	0	2.6
Psychology	7.9	10.5	7.1	11.5	5.8	13.3	22.7	14.2	26.2
Non-S&E[2]	1.8	5.7	4.0	9.5	6.0	7.1	4.1	3.7	9.0

[1] In this report, "Physical science" includes earth, atmospheric, and oceanographic sciences, as well as physics, astronomy, and chemistry.

[2] Non-S&E refers to non-science and non-engineering.

NOTES: Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

See section C for specific fields included in each category.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies data from NSF/SRS, Survey of Earned Doctorates.

Table 31. Number of earned bachelor's degrees awarded in engineering technologies, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	20,098	19,150	18,294	17,113	16,987	16,654	16,542	16,156	14,584
U.S. citizens and permanent residents, total[1]	19,439	18,423	17,582	16,597	16,546	16,161	15,992	15,571	14,027
White, non-Hispanics	16,156	15,251	14,279	13,286	13,245	12,909	12,616	12,032	10,946
Asians	839	755	768	778	768	720	727	730	473
Underrepresented minorities, total	1,947	2,053	2,033	2,074	2,096	2,160	2,317	2,470	2,244
Black, non-Hispanics	1,208	1,200	1,227	1,239	1,132	1,249	1,319	1,370	1,423
Hispanics	634	784	731	747	853	813	883	988	722
American Indians or Alaskan Natives	105	69	75	88	111	98	115	112	99
U.S. citizens and permanent residents, unknown race/ethnicity	497	364	502	459	437	372	332	339	364
Nonresident aliens[2]	659	727	712	516	441	493	550	585	557
	Men								
Total	17,999	17,113	16,329	15,309	15,089	14,835	14,649	14,325	12,889
U.S. citizens and permanent residents, total[1]	17,383	16,431	15,660	14,841	14,687	14,401	14,141	13,794	12,379
White, non-Hispanics	14,578	13,679	12,819	12,069	11,908	11,694	11,332	10,882	9,836
Asians	743	679	700	690	678	641	637	656	421
Underrepresented minorities, total	1,601	1,733	1,692	1,659	1,694	1,729	1,881	1,956	1,781
Black, non-Hispanics	941	953	968	949	892	959	1,042	1,041	1,095
Hispanics	567	722	655	629	710	687	741	828	604
American Indians or Alaskan Natives	93	58	69	81	92	83	98	87	82
U.S. citizens and permanent residents, unknown race/ethnicity	461	340	449	423	407	337	291	300	341
Nonresident aliens[2]	616	682	669	468	402	434	508	531	510
	Women								
Total	2,099	2,037	1,965	1,804	1,898	1,819	1,893	1,831	1,695
U.S. citizens and permanent residents, total[1]	2,056	1,992	1,922	1,756	1,859	1,760	1,851	1,777	1,648
White, non-Hispanics	1,578	1,572	1,460	1,217	1,337	1,215	1,284	1,150	1,110
Asians	96	76	68	88	90	79	90	74	52
Underrepresented minorities, total	346	320	341	415	402	431	436	514	463
Black, non-Hispanics	267	247	259	290	240	290	277	329	328
Hispanics	67	62	76	118	143	126	142	160	118
American Indians or Alaskan Natives	12	11	6	7	19	15	17	25	17
U.S. citizens and permanent residents, unknown race/ethnicity	36	24	53	36	30	35	41	39	23
Nonresident aliens[2]	43	45	43	48	39	59	42	54	47

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Engineering technologies are instructional programs that prepare individuals to support and assist engineering and related professionals or to independently provide such services. Programs stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

Table 32. Number of earned master's degrees awarded in engineering technologies, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	1,135	1,194	1,188	1,278	1,555	1,547	1,577	1,651	1,414
U.S. citizens and permanent residents, total[1]	1,004	1,032	1,016	1,063	1,276	1,256	1,268	1,353	1,153
White, non-Hispanics	802	823	830	817	1,041	994	982	1,053	950
Asians	40	79	60	58	40	46	55	61	49
Underrepresented minorities, total	67	58	69	92	94	112	131	135	115
Black, non-Hispanics	55	44	47	64	61	72	85	81	86
Hispanics	10	9	19	23	25	37	40	47	26
American Indians or Alaskan Natives	2	5	3	5	8	3	6	7	3
U.S. citizens and permanent residents, unknown race/ethnicity	95	72	57	96	101	104	100	104	39
Nonresident aliens[2]	131	162	172	215	279	291	309	298	261
	Men								
Total	892	888	888	971	1,172	1,164	1,136	1,179	1,012
U.S. citizens and permanent residents, total[1]	789	757	757	815	961	949	940	990	842
White, non-Hispanics	631	607	619	619	783	753	726	777	704
Asians	36	40	39	45	28	33	41	41	34
Underrepresented minorities, total	48	43	47	66	57	75	89	87	76
Black, non-Hispanics	40	32	29	46	32	48	53	51	56
Hispanics	7	7	17	16	18	27	32	32	17
American Indians or Alaskan Natives	1	4	1	4	7	0	4	4	3
U.S. citizens and permanent residents, unknown race/ethnicity	74	67	52	85	93	88	84	85	28
Nonresident aliens[2]	103	131	131	156	211	215	196	189	170
	Women								
Total	243	306	300	307	383	383	441	472	402
U.S. citizens and permanent residents, total[1]	215	275	259	248	315	307	328	363	311
White, non-Hispanics	171	216	211	198	258	241	256	276	246
Asians	4	39	21	13	12	13	14	20	15
Underrepresented minorities, total	19	15	22	26	37	37	42	48	39
Black, non-Hispanics	15	12	18	18	29	24	32	30	30
Hispanics	3	2	2	7	7	10	8	15	9
American Indians or Alaskan Natives	1	1	2	1	1	3	2	3	0
U.S. citizens and permanent residents, unknown race/ethnicity	21	5	5	11	8	16	16	19	11
Nonresident aliens[2]	28	31	41	59	68	76	113	109	91

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only.

NOTES: Data on race/ethnicity of degree recipients were collected on broad fields of study only until 1994; therefore, these trend data could not be adjusted to the exact field taxonomies used by NSF.

Engineering technologies are instructional programs that prepare individuals to support and assist engineering and related professionals or to independently provide such services. Programs stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

Table 33. Number of earned bachelor's degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	60,114	59,852	60,228	62,655	67,942	75,229	80,629	84,759	86,243
U.S. citizens and permanent residents, total[1]	59,367	59,056	59,250	61,792	66,929	74,200	79,608	83,641	85,135
White, non-Hispanics	49,854	48,405	48,798	51,328	55,482	61,624	64,992	67,509	67,823
Asians	1,698	1,823	1,981	2,229	2,469	3,024	3,488	3,952	4,428
Underrepresented minorities, total	6,474	6,890	6,881	7,048	7,758	8,225	9,453	10,417	10,915
Black, non-Hispanics	3,886	4,056	4,122	4,151	4,670	4,817	5,691	6,186	6,438
Hispanics	2,348	2,580	2,481	2,571	2,747	3,018	3,305	3,722	3,939
American Indians or Alaskan Natives	240	254	278	326	341	390	457	509	538
U.S. citizens and permanent residents, unknown race/ethnicity	1,341	1,938	1,590	1,187	1,220	1,327	1,675	1,763	1,969
Nonresident aliens[2]	747	796	978	863	1,013	1,029	1,021	1,118	1,108
	Men								
Total	9,068	9,418	9,855	10,305	11,467	13,180	14,564	15,561	16,008
U.S. citizens and permanent residents, total[1]	8,842	9,176	9,572	10,057	11,189	12,912	14,295	15,309	15,717
White, non-Hispanics	7,339	7,521	7,717	8,230	9,081	10,627	11,503	12,249	12,367
Asians	398	392	468	541	561	694	891	968	1,108
Underrepresented minorities, total	899	1,030	1,094	1,032	1,285	1,315	1,595	1,781	1,876
Black, non-Hispanics	451	502	525	530	673	659	850	920	940
Hispanics	401	491	519	441	545	576	652	768	823
American Indians or Alaskan Natives	47	37	50	61	67	80	93	93	113
U.S. citizens and permanent residents, unknown race/ethnicity	206	233	293	254	262	276	306	311	366
Nonresident aliens[2]	226	242	283	248	278	268	269	252	291
	Women								
Total	51,046	50,434	50,373	52,350	56,475	62,049	66,065	69,198	70,235
U.S. citizens and permanent residents, total[1]	50,525	49,880	49,678	51,735	55,740	61,288	65,313	68,332	69,418
White, non-Hispanics	42,515	40,884	41,081	43,098	46,401	50,997	53,489	55,260	55,456
Asians	1,300	1,431	1,513	1,688	1,908	2,330	2,597	2,984	3,320
Underrepresented minorities, total	5,575	5,860	5,787	6,016	6,473	6,910	7,858	8,636	9,039
Black, non-Hispanics	3,435	3,554	3,597	3,621	3,997	4,158	4,841	5,266	5,498
Hispanics	1,947	2,089	1,962	2,130	2,202	2,442	2,653	2,954	3,116
American Indians or Alaskan Natives	193	217	228	265	274	310	364	416	425
U.S. citizens and permanent residents, unknown race/ethnicity	1,135	1,705	1,297	933	958	1,051	1,369	1,452	1,603
Nonresident aliens[2]	521	554	695	615	735	761	752	866	817

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only.

NOTE: Health fields includes the medical and other health sciences shown in section C.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey

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Table 34. Number of earned master's degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	19,410	20,482	21,398	23,213	25,823	28,314	31,481	33,475	36,014
U.S. citizens and permanent residents, total[1]	18,337	19,400	20,160	21,903	24,357	26,814	29,734	31,960	34,335
White, non-Hispanics	15,474	16,284	17,002	18,464	20,509	22,154	24,141	25,894	27,968
Asians	537	600	600	709	830	962	1,519	1,727	1,594
Underrepresented minorities, total	1,430	1,523	1,667	1,867	2,084	2,528	2,784	3,159	3,226
Black, non-Hispanics	814	886	1,004	1,092	1,251	1,431	1,609	1,804	1,910
Hispanics	535	558	572	685	718	967	1,049	1,205	1,150
American Indians or Alaskan Natives	81	79	91	90	115	130	126	150	166
U.S. citizens and permanent residents, unknown race/ethnicity	896	993	891	863	934	1,170	1,290	1,180	1,547
Nonresident aliens[2]	1,073	1,082	1,238	1,310	1,466	1,500	1,747	1,515	1,679
	Men								
Total	4,239	4,554	4,499	4,714	5,248	5,874	6,793	6,980	7,697
U.S. citizens and permanent residents, total[1]	3,720	4,080	3,956	4,175	4,638	5,274	6,078	6,352	7,011
White, non-Hispanics	3,094	3,309	3,215	3,399	3,807	4,216	4,658	4,870	5,557
Asians	162	181	170	215	222	295	578	615	501
Underrepresented minorities, total	321	313	362	352	399	495	568	608	621
Black, non-Hispanics	173	158	194	171	207	220	280	298	325
Hispanics	128	135	146	158	172	250	261	271	264
American Indians or Alaskan Natives	20	20	22	23	20	25	27	39	32
U.S. citizens and permanent residents, unknown race/ethnicity	143	277	209	209	210	268	274	259	332
Nonresident aliens[2]	519	474	543	539	610	600	715	628	686
	Women								
Total	15,171	15,928	16,899	18,499	20,575	22,440	24,688	26,495	28,317
U.S. citizens and permanent residents, total[1]	14,617	15,320	16,204	17,728	19,719	21,540	23,656	25,608	27,324
White, non-Hispanics	12,380	12,975	13,787	15,065	16,702	17,938	19,483	21,024	22,411
Asians	375	419	430	494	608	667	941	1,112	1,093
Underrepresented minorities, total	1,109	1,210	1,305	1,515	1,685	2,033	2,216	2,551	2,605
Black, non-Hispanics	641	728	810	921	1,044	1,211	1,329	1,506	1,585
Hispanics	407	423	426	527	546	717	788	934	886
American Indians or Alaskan Natives	61	59	69	67	95	105	99	111	134
U.S. citizens and permanent residents, unknown race/ethnicity	753	716	682	654	724	902	1,016	921	1,215
Nonresident aliens[2]	554	608	695	771	856	900	1,032	887	993

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only.

NOTE: Health fields includes the medical and other health sciences shown in section C.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies, data from Department of Education National Center for Education Statistics: Integrated Postsecondary Education Data System Completions Survey.

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Table 35. Number of earned doctoral degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	974	956	1,041	1,112	1,197	1,296	1,330	1,324	1,422
U.S. citizens and permanent residents, total[1]	756	756	839	855	939	1,050	1,045	1,016	1,018
White, non-Hispanics	684	662	720	735	800	867	835	822	821
Asians	22	39	44	52	45	94	94	89	87
Underrepresented minorities, total	43	50	61	56	89	77	99	91	93
Black, non-Hispanics	29	32	40	38	59	46	60	49	55
Hispanics	11	17	16	13	24	25	30	38	32
American Indians or Alaskan Natives	3	1	5	5	6	6	9	4	6
U.S. citizens and permanent residents, unknown race/ethnicity	7	5	14	12	5	12	17	14	17
Nonresident aliens[2]	134	166	171	226	214	230	245	267	253
Citizenship unknown	84	34	31	31	44	16	40	41	151
	Men								
Total	345	364	373	402	420	453	487	463	486
U.S. citizens and permanent residents, total[1]	225	239	252	226	260	328	325	292	283
White, non-Hispanics	195	203	199	177	208	258	234	211	215
Asians	13	17	21	22	22	48	52	47	37
Underrepresented minorities, total	13	17	27	21	26	19	35	30	25
Black, non-Hispanics	9	14	17	14	18	11	18	13	15
Hispanics	4	2	7	4	8	7	15	16	8
American Indians or Alaskan Natives	0	1	3	3	0	1	2	1	2
U.S. citizens and permanent residents, unknown race/ethnicity	4	2	5	6	4	3	4	4	6
Nonresident aliens[2]	87	101	101	159	138	115	142	151	128
Citizenship unknown	33	24	20	17	22	10	20	20	75
	Women								
Total	629	592	668	710	777	843	843	861	936
U.S. citizens and permanent residents, total[1]	531	517	587	629	679	722	720	724	735
White, non-Hispanics	489	459	521	558	592	609	601	611	606
Asians	9	22	23	30	23	46	42	42	50
Underrepresented minorities, total	30	33	34	35	63	58	64	61	68
Black, non-Hispanics	20	18	23	24	41	35	42	36	40
Hispanics	7	15	9	9	16	18	15	22	24
American Indians or Alaskan Natives	3	0	2	2	6	5	7	3	4
U.S. citizens and permanent residents, unknown race/ethnicity	3	3	9	6	1	9	13	10	11
Nonresident aliens[2]	47	65	70	67	76	115	103	116	125
Citizenship unknown	51	10	11	14	22	6	20	21	76

1 Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2 Nonresident aliens include foreign citizens on temporary visas only.

NOTE: Health fields includes the medical and other health sciences shown in section C.

SOURCE: Tabulated by National Science Foundation/Division of Science Resources Studies; data from NSF/SRS, Survey of Earned Doctorates.

Table 36. First-professional degrees awarded, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	71,318	71,551	72,636	74,801	76,068	76,000	76,457	77,505	79,169
U.S. citizens and permanent residents, total[1]	70,358	70,515	71,550	73,459	74,520	74,563	74,846	75,873	77,515
White, non-Hispanics	59,597	59,376	59,692	59,869	60,338	58,476	58,239	58,179	58,769
Asians	2,903	3,299	3,772	4,757	5,107	5,759	6,277	6,513	7,234
Underrepresented minorities, total	6,025	6,549	6,984	7,334	8,075	8,314	8,877	9,501	9,846
Black, non-Hispanics	3,017	3,337	3,535	3,568	4,078	4,329	4,657	4,905	5,153
Hispanics	2,746	2,959	3,191	3,472	3,632	3,623	3,816	4,143	4,192
American Indians or Alaskan Natives	262	253	258	294	365	362	404	453	501
U.S. citizens and permanent residents, unknown race/ethnicity	1,833	1,291	1,102	1,499	1,000	2,014	1,453	1,680	1,666
Nonresident aliens[2]	960	1,036	1,086	1,342	1,548	1,437	1,611	1,632	1,654
	Men								
Total	45,399	44,309	44,226	45,459	45,565	45,068	45,193	45,182	45,747
U.S. citizens and permanent residents, total[1]	44,728	43,607	43,464	44,511	44,462	44,053	44,112	44,064	44,619
White, non-Hispanics	38,499	37,367	36,926	37,089	36,896	35,526	35,409	34,972	35,077
Asians	1,772	1,946	2,171	2,728	2,831	3,139	3,423	3,483	3,887
Underrepresented minorities, total	3,375	3,501	3,663	3,831	4,122	4,155	4,388	4,589	4,679
Black, non-Hispanics	1,568	1,627	1,653	1,620	1,777	1,851	2,036	2,058	2,139
Hispanics	1,661	1,738	1,868	2,054	2,156	2,088	2,134	2,281	2,258
American Indians or Alaskan Natives	146	136	142	157	189	216	218	250	282
U.S. citizens and permanent residents, unknown race/ethnicity	1,082	793	704	863	613	1,233	892	1,020	976
Nonresident aliens[2]	671	702	762	948	1,103	1,015	1,081	1,118	1,128
	Women								
Total	25,919	27,242	28,410	29,342	30,503	30,932	31,264	32,323	33,422
U.S. citizens and permanent residents, total[1]	25,630	26,908	28,086	28,948	30,058	30,510	30,734	31,809	32,896
White, non-Hispanics	21,098	22,009	22,766	22,780	23,442	22,950	22,830	23,207	23,692
Asians	1,131	1,353	1,601	2,029	2,276	2,620	2,854	3,030	3,347
Underrepresented minorities, total	2,650	3,048	3,321	3,503	3,953	4,159	4,489	4,912	5,167
Black, non-Hispanics	1,449	1,710	1,882	1,948	2,301	2,478	2,621	2,847	3,014
Hispanics	1,085	1,221	1,323	1,418	1,476	1,535	1,682	1,862	1,934
American Indians or Alaskan Natives	116	117	116	137	176	146	186	203	219
U.S. citizens and permanent residents, unknown race/ethnicity	751	498	398	636	387	781	561	660	690
Nonresident aliens[2]	289	334	324	394	445	422	530	514	526

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only.

NOTE: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of pre-professional training. First-professional degrees include: Chiropractic, Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry, Veterinary Medicine, Law, Divinity/Ministry, and Rabbinical and Talmudic Studies.

SOURCE: Tabulated by National Science Foundation/Division of Science Resource Studies; data from Department of Education/National Center or Education Statistics: Integrated Postsecondary Education Data System Completions Survey

Table 37. First-professional degrees awarded in health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	29,518	28,787	28,183	28,303	29,475	29,680	30,757	31,250	32,114
U.S. citizens and permanent residents, total[1]	29,036	28,252	27,677	27,600	28,693	28,861	29,867	30,329	31,226
White, non-Hispanics	24,094	23,027	21,958	21,333	22,076	21,730	22,242	22,314	23,187
Asians	1,978	2,290	2,472	2,909	3,317	3,637	3,996	4,075	4,127
Underrepresented minorities, total	2,591	2,724	2,777	2,840	2,915	3,000	3,110	3,412	3,469
Black, non-Hispanics	1,159	1,251	1,285	1,288	1,350	1,437	1,525	1,646	1,800
Hispanics	1,323	1,373	1,381	1,417	1,426	1,432	1,461	1,600	1,472
American Indians or Alaskan Natives	109	100	111	135	139	131	124	166	197
U.S. citizens and permanent residents, unknown race/ethnicity	373	211	470	518	385	494	519	528	443
Nonresident aliens[2]	482	535	506	703	782	819	890	921	888
	Men								
Total	19,596	18,562	17,777	17,694	17,704	17,565	17,975	17,927	18,308
U.S. citizens and permanent residents, total[1]	19,283	18,235	17,449	17,220	17,194	17,034	17,424	17,335	17,719
White, non-Hispanics	16,298	15,232	14,207	13,607	13,608	13,243	13,352	13,215	13,702
Asians	1,217	1,363	1,440	1,718	1,859	1,972	2,190	2,217	2,198
Underrepresented minorities, total	1,506	1,510	1,479	1,587	1,490	1,504	1,572	1,589	1,583
Black, non-Hispanics	581	606	573	604	556	582	649	621	672
Hispanics	861	847	841	907	858	840	858	874	790
American Indians or Alaskan Natives	64	57	65	76	76	82	65	94	121
U.S. citizens and permanent residents, unknown race/ethnicity	262	130	323	308	237	315	310	314	236
Nonresident aliens[2]	313	327	328	474	510	531	551	592	589
	Women								
Total	9,922	10,225	10,406	10,609	11,771	12,115	12,782	13,323	13,806
U.S. citizens and permanent residents, total[1]	9,753	10,017	10,228	10,380	11,499	11,827	12,443	12,994	13,507
White, non-Hispanics	7,796	7,795	7,751	7,726	8,468	8,487	8,890	9,099	9,485
Asians	761	927	1,032	1,191	1,458	1,665	1,806	1,858	1,929
Underrepresented minorities, total	1,085	1,214	1,298	1,253	1,425	1,496	1,538	1,823	1,886
Black, non-Hispanics	578	645	712	684	794	855	876	1,025	1,128
Hispanics	462	526	540	510	568	592	603	726	682
American Indians or Alaskan Natives	45	43	46	59	63	49	59	72	76
U.S. citizens and permanent residents, unknown race/ethnicity	111	81	147	210	148	179	209	214	207
Nonresident aliens[2]	169	208	178	229	272	288	339	329	299

[1] Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

[2] Nonresident aliens include foreign citizens on temporary visas only.

NOTES: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of pre-professional training.

Health fields include: Chiropractic, Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry, and Veterinary Medicine.

SOURCE: Tabulated by National Science Foundation/Division of Science Resource Studies; data from Department of Education/National Center or Education Statistics: Integrated Postsecondary Education Data System Completions Survey

Table 38. First-professional degrees awarded in non-health fields, by citizenship, race/ethnicity and sex of recipient: 1989-97

Citizenship and race/ethnicity	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Total								
Total	41,800	42,764	44,453	46,498	46,593	46,320	45,700	46,255	47,055
U.S. citizens and permanent residents, total[1]	41,322	42,263	43,873	45,859	45,827	45,702	44,979	45,544	46,289
White, non-Hispanics	35,503	36,349	37,734	38,536	38,262	36,746	35,997	35,865	35,582
Asians	925	1,009	1,300	1,848	1,790	2,122	2,281	2,438	3,107
Underrepresented minorities, total	3,434	3,825	4,207	4,494	5,160	5,314	5,767	6,089	6,377
Black, non-Hispanics	1,858	2,086	2,250	2,280	2,728	2,892	3,132	3,259	3,353
Hispanics	1,423	1,586	1,810	2,055	2,206	2,191	2,355	2,543	2,720
American Indians or Alaskan Natives	153	153	147	159	226	231	280	287	304
U.S. citizens and permanent residents, unknown race/ethnicity	1,460	1,080	632	981	615	1,520	934	1,152	1,223
Nonresident aliens[2]	478	501	580	639	766	618	721	711	766
	Men								
Total	25,803	25,747	26,449	27,765	27,861	27,503	27,218	27,255	27,439
U.S. citizens and permanent residents, total[1]	25,445	25,372	26,015	27,291	27,268	27,019	26,688	26,729	26,900
White, non-Hispanics	22,201	22,135	22,719	23,482	23,288	22,283	22,057	21,757	21,375
Asians	555	583	731	1,010	972	1,167	1,233	1,266	1,689
Underrepresented minorities, total	1,869	1,991	2,184	2,244	2,632	2,651	2,816	3,000	3,096
Black, non-Hispanics	987	1,021	1,080	1,016	1,221	1,269	1,387	1,437	1,467
Hispanics	800	891	1,027	1,147	1,298	1,248	1,276	1,407	1,468
American Indians or Alaskan Natives	82	79	77	81	113	134	153	156	161
U.S. citizens and permanent residents, unknown race/ethnicity	820	663	381	555	376	918	582	706	740
Nonresident aliens[2]	358	375	434	474	593	484	530	526	539
	Women								
Total	15,997	17,017	18,004	18,733	18,732	18,817	18,482	19,000	19,616
U.S. citizens and permanent residents, total[1]	15,877	16,891	17,858	18,568	18,559	18,683	18,291	18,815	19,389
White, non-Hispanics	13,302	14,214	15,015	15,054	14,974	14,463	13,940	14,108	14,207
Asians	370	426	569	838	818	955	1,048	1,172	1,418
Underrepresented minorities, total	1,565	1,834	2,023	2,250	2,528	2,663	2,951	3,089	3,281
Black, non-Hispanics	871	1,065	1,170	1,264	1,507	1,623	1,745	1,822	1,886
Hispanics	623	695	783	908	908	943	1,079	1,136	1,252
American Indians or Alaskan Natives	71	74	70	78	113	97	127	131	143
U.S. citizens and permanent residents, unknown race/ethnicity	640	417	251	426	239	602	352	446	483
Nonresident aliens[2]	120	126	146	165	173	134	191	185	227

1 Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2 Nonresident aliens include foreign citizens on temporary visas only.

NOTES: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of pre-professional training.

Non-health fields include: Law, Divinity/Ministry, and Rabbinical and Talmudic Studies.

SOURCE: Tabulated by National Science Foundation/Division of Science Resource Studies; data from Department of Education/National Center or Education Statistics: Integrated Postsecondary Education Data System Completions Survey

SECTION C.

CLASSIFICATION OF PROGRAMS

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
SCIENCE AND ENGINEERING (S&E)	**SCIENCE AND ENGINEERING (S&E)**	**SCIENCE AND ENGINEERING (S&E)**
ENGINEERING 14 Engineering	**ENGINEERING** 14 Engineering	**ENGINEERING** **Aeronautical/Astronautical Engineering** 300 Aerospace, Aeronautical, and Astronautical Engineering **Chemical Engineering** 312 Chemical Engineering 366 Petroleum Engineering 369 Polymer and Plastics Engineering 547 Fuel Technology and Petroleum Engineering **Civil Engineering** 315 Civil Engineering 336 Environmental Health Engineering **Electrical Engineering** 318 Communications Engineering 321 Computer Engineering 322 Electrical Engineering 323 Electronics Engineering 324 Electrical and Electronics Engineering **Industrial Engineering** 339 Industrial and Manufacturing Engineering **Mechanical Engineering** 327 Engineering Mechanics 345 Mechanical Engineering

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		Materials/Metallurgical Engineering 309 Ceramic Sciences 342 Materials Science 348 Metallurgical Engineering **Other Engineering** 303 Agricultural Engineering 306 Bioengineering and Biomedical Engineering 330 Engineering Physics 333 Engineering Science 351 Mining and Mineral Engineering 354 Naval Architecture and Marine Engineering 357 Nuclear Engineering 360 Ocean Engineering 363 Operations Research 372 Systems Engineering 375 Textile Engineering 398 Engineering, General 399 Engineering, Other
SCIENCES NATURAL SCIENCES **Physical Science** 40 Physical Sciences (Includes Earth/Atmospheric/ Oceanographic Sciences)	**SCIENCES** NATURAL SCIENCES **Physical Science** 40 Physical Sciences (Includes Earth/Atmospheric/ Oceanographic Sciences)	**SCIENCES** NATURAL SCIENCES/ PHYSICAL SCIENCES **Astronomy** 500 Astronomy 505 Astrophysics 506 Astronomy and Astrophysics **Chemistry** 520 Analytical Chemistry 521 Agricultural and Food Chemistry 522 Inorganic Chemistry 524 Nuclear Chemistry 526 Organic Chemistry 528 Pharmaceutical Chemistry 530 Physical Chemistry 532 Polymer Chemistry 534 Theoretical Chemistry

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		538 Chemistry, General 539 Chemistry, Other **Physics** 560 Acoustics 561 Chemical and Atomic/ Molecular Physics 562 Electron Physics 563 Electromagnetic Physics 564 Elementary Particle Physics 566 Fluids 567 Mechanics 568 Nuclear Physics 569 Optics 570 Plasma and High-Temperature Physics 572 Polymer Physics 573 Thermal Physics 574 Solid State and Low-Temperature Physics 575 Theoretical Physics 578 Physics, General 579 Physics, Other **Other Physical Sciences** 599 Physical Sciences, Other **Atmospheric Sciences** 510 Atmospheric Physics and Chemistry 512 Atmospheric Dynamics 514 Meteorology 518 Atmospheric Science/ Meteorology, General 519 Atmospheric Science/ Meteorology, Other **Geosciences** 540 Geology 542 Geochemistry 544 Geophysics and Seismology 545 Geophysics (Solid Earth) 546 Paleontology 548 Mineralogy and Petrology

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		549 Mineralogy, Petrology, and Geochemistry 550 Stratigraphy and Sedimentation 552 Geomorphology and Glacial Geology 554 Applied Geology 555 Applied Geology and Geological Engineering 558 Geological and Related Sciences, General 559 Geological and Related Sciences, Other 585 Hydrology and Water Resources
		Oceanography 590 Oceanography 595 Marine Sciences
		Other Environmental Sciences 580 Environmental Science
		MATHEMATICAL/COMPUTER SCIENCES
Mathematical Science 27 Mathematics	**Mathematical Science** 27 Mathematics	**Mathematics** 420 Applied Mathematics 425 Algebra 430 Analysis and Functional Analysis 435 Geometry 440 Logic 445 Number Theory 450 Mathematical Statistics 455 Topology 460 Computing Theory and Practice 465 Operations Research 498 Mathematics, General 499 Mathematics, Other

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
Computer Science	**Computer Science**	**Computer Science**
11 Computer and Information Sciences	11 Computer and Information Sciences	400 Computer Science
		410 Information Science and Systems
		BIOLOGICAL/AGRICULTURAL SCIENCES
Agricultural Science	**Agricultural Science**	**Agricultural Sciences**
02 Agricultural Sciences	02 Agricultural Sciences	005 Animal Breeding and Genetics
03 Renewable Natural Resources	03 Conservation and Renewable Natural Resources	007 Animal Husbandry
		010 Animal Nutrition
		012 Dairy Science
		014 Poultry Science
		019 Animal Sciences, Other
		020 Agronomy and Crop Science
		025 Plant Breeding and Genetics
		030 Plant Pathology
		032 Plant Protection/Pest Management
		039 Plant Sciences, Other
		040 Food Sciences
		042 Food Distribution
		043 Food Engineering
		044 Food Sciences, Other
		045 Soil Sciences
		046 Soil Chemistry and Microbiology
		049 Soil Sciences, Other
		050 Horticulture Science
		054 Fish and Wildlife
		055 Fisheries Science and Management
		060 Wildlife Management
		065 Forestry Sciences
		066 Forest Biology
		068 Forest Engineering
		070 Forest Management
		072 Wood Science and Pulp/Paper Technology
		074 Conservation and Renewable Natural Resources
		079 Forestry and Related Sciences

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		080 Wildlife and Range Management
		098 Agricultural Science, General
		099 Agricultural Science, Other
Biological Science	**Biological Science**	**Biological Sciences**
26 Biological Sciences/Life Sciences	26 Biological Sciences/Life Sciences	100 Biochemistry
		105 Biophysics
		107 Biotechnology Research
		110 Bacteriology
		115 Plant Genetics
		120 Plant Pathology
		125 Plant Physiology
		129 Botany, Other
		130 Anatomy
		133 Biometrics and Biostatistics
		136 Cell Biology
		139 Ecology
		140 Hydrobiology
		142 Embryology
		145 Endocrinology
		148 Entomology
		151 Biological Immunology
		154 Molecular Biology
		156 Microbiology and Bacteriology
		157 Microbiology
		160 Neuroscience
		163 Nutritional Sciences
		166 Parasitology
		169 Toxicology
		170 Genetics, Human and Animal
		171 Genetics
		175 Pathology, Human and Animal
		180 Pharmacology, Human and Animal
		185 Physiology, Human and Animal
		186 Animal and Plant Physiology
		189 Zoology, Other
		198 Biological Sciences, General
		199 Biological Sciences, Other

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Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
SOCIAL SCIENCES	**SOCIAL SCIENCES**	**SOCIAL SCIENCES** **Economics** 000 Agricultural Economics 666 Economics 668 Econometrics **Political Science** 674 International Relations/Affairs 678 Political Science and Government 679 Political Science and Public Administration 682 Public Policy Analysis 976 Public Administration **Sociology** 662 Demography and Population Studies 686 Sociology
Social Science 05 Area and Ethnic Studies 45 Social Sciences	**Social Science** 05 Area, Ethnic, and Cultural Studies 45 Social Sciences and History	**Other Social Sciences** 650 Anthropology 652 Area Studies 658 Criminology 670 Geography 690 Statistics 694 Urban Affairs/Studies 698 Social Sciences, General 699 Social Sciences, Other 710 History and Philosophy of Science and Technology 729 Linguistics 770 American Studies 773 Archeology
Psychology 42 Psychology	**Psychology** 42 Psychology	**Psychology** 600 Clinical Psychology 603 Cognitive Psychology and Psycholinguistics 606 Comparative Psychology 609 Counseling Psychology 612 Developmental and Child Psychology 613 Human Indiv. & Family Development

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		825 School Psychology (See also 636)
		830 Social/Philosophical Foundations of Education
		835 Special Education
		840 Counseling Education/ Counseling and Guidance Services
		845 Education Evaluation and Research
		850 Pre-elementary/Early Childhood Teacher Education
		852 Elementary Teacher Education
		854 Junior High Teacher Education
		856 Secondary Teacher Education
		858 Adult and Continuing Teacher Education
		861 Art Education
		862 Business Education
		864 English Education
		866 Foreign Languages Education
		867 Physical Education, Health, and Recreation
		870 Home Economics Education
		876 Music Education
		880 Physical Education and Coaching
		882 Reading Education
		886 Speech Education
		888 Trade and Industrial Education
		889 Teacher Education, Specific Academic and Vocational Programs, Other
		898 Education, General
		899 Education, Other

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		615 Experimental Psychology 616 Experimental, Physiological Psychology 618 Educational Psychology 619 Human Engineering 621 Industrial and Organizational Psychology 624 Personality Psychology 627 Physiological Psychology/ Psychobiology 630 Psychometrics 631 Human Indiv. & Family Development 633 Quantitative Psychology 636 School Psychology 639 Social Psychology 648 Psychology, General 649 Psychology, Other
NON-S&E	**NON-S&E**	**NON-S&E**
01 Agribusiness and Agricultural Production 04 Architecture and Environmental Design 06 Business and Management 07 Business (Administrative Support), Other 08 Marketing and Distribution 09 Communications 12 Consumer, Personal, and Miscellaneous Services 13 Education 16 Foreign Languages 17 Allied Health 18 Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic) 19 Home Economics 20 Vocational Home Economics	01 Agricultural Business and Production 04 Architecture and Related Programs 08 Marketing Operations/ Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures 17 Allied Health	**MEDICAL SCIENCES** 205 Dentistry 210 Environmental Health 215 Public Health 219 Public Health and Epidemiology 220 Epidemiology 225 Medicine and Surgery 235 Optometry and Ophthalmology 240 Pharmacy 250 Veterinary Science **OTHER HEALTH SCIENCES** 200 Speech/Language Pathology and Audiology 212 Health Systems/Services Administration 224 Hospital Administration 230 Nursing 245 Rehabilitation/Therapeutic Services 298 Health Sciences, General 299 Health Sciences, Other

Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
	18 Health Professions and Related Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic, Allied Health)	**HISTORY**
	19 Home Economics	700 History, American
	20 Vocational Home Economics	705 History, European
22 Law	22 Law and Legal Studies	718 History, General
23 Letters	23 English Language and Literature/Letters	719 History, Other
24 Liberal/General Studies	24 Liberal/General Studies	**ENGLISH AND LITERATURE**
25 Library and Archival Sciences	25 Library and Archival Sciences	720 Classics
28 Military Sciences	28 Reserve Officer Training Corps (ROTC)	723 Comparative Literature
29 Military Technologies	29 Military Technologies	725 English and American Literature
30 Multi-/Interdisciplinary Studies	30 Multi-/Interdisciplinary Studies	732 Literature, American
31 Parks and Recreation	31 Parks, Recreation, Leisure, and Fitness Studies	733 Literature, English
38 Philosophy and Religion	38 Philosophy and Religion	734 English Language
39 Theology	39 Theological Studies and Religious Vocations	736 Speech and Rhetorical Studies
41 Science Technologies	41 Science Technologies	738 Letters, General
44 Public Affairs (Does not include Parks and Recreation Management, and Law Enforcement and Correction)	43 Protective Services	739 Letters, Other
43 Protective Services	44 Public Administration and Services (Does not include Parks and Recreation Management, and Law Enforcement and Correction)	**FOREIGN LANGUAGES**
46 Construction Trades	46 Construction Trades	740 French
47 Mechanics and Repairers	47 Mechanics and Repairers	743 German
48 Precision Production	48 Precision Production Trades	746 Italian
49 Transportation and Material Moving	49 Transportation and Materials Moving Workers	749 Spanish
50 Visual and Performing Arts	50 Visual and Performing Arts	752 Russian
	52 Business Management and Administrative Services	755 Slavic (Other than Russian)
		758 Chinese
		762 Japanese
		765 Hebrew
		768 Arabic
		769 Other Languages and Literature
		OTHER HUMANITIES
		785 Philosophy (See also 440)
		798 Humanities, General
		799 Humanities, Other
		RELIGION AND THEOLOGY
		790 Religion (See also 984)
		791 Religion and Theology
		984 Theology/Religious Education (See also 790)

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Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		BUSINESS AND MANAGEMENT
		002 Agricultural Business and Management
		900 Accounting
		905 Banking/Financial Support Services
		910 Business Administration and Management
		915 Business/Managerial Economics
		917 Management Information Systems/Business Data Processing
		920 Marketing Management and Research
		925 Business Statistics
		930 Operations Research (See also 363, 465)
		935 Organizational Behavior (See also 621)
		938 Business Management/ Administrative Services, General
		939 Business Management/ Administrative Services, Other
		INFORMATION FIELDS (JOURNALISM, BROADCASTING, LIBRARIANSHIP)
		940 Communications Research
		945 Journalism
		947 Mass Communications
		950 Radio and Television
		957 Communication Theory
		958 Communications, General
		959 Communications, Other
		972 Library Science
		LAW
		968 Law

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Intergrated Postsecondary Education Data System (IPEDS) and Survey of Earned Doctorates Classification System—continued

Fields of study collected in IPEDS, 1985–91	Fields of study from the IPEDS, 1992–97	Fields of study from the Survey of Earned Doctorates classification
		SOCIAL SERVICE PROFESSIONS
		980 Social Service Professions
		VOCATIONAL STUDIES AND HOME ECONOMICS
		964 Home Economics
		OTHER NON-SCIENCE FIELDS
		974 Parks/Recreation/ Leisure/ Fitness
		988 Professional Fields, General
		989 Professional Fields, Other
		999 Other Fields

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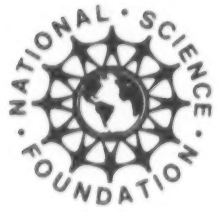

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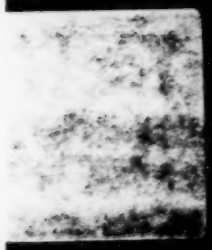

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